The Arris and Gale Lectures

ON THE

PHYSIOLOGICAL FACTORS INVOLVED IN THE CAUSATION OF DROPSY.

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LECTURE I.

THE PRODUCTION OF LYMPH.

MR. PRESIDENT AND GENTLEMEN,—The term dropsy is used to denote the condition in which there is an abnormal accumulation of lymph in the connective tissue spaces, including the serous cavities of the body. Under normal circumstances these spaces contain lymph, but the amount present never exceeds a certain limit. Under no physiological conditions can we speak of the spaces as distended with fluid. Now, the lymph in these spaces is derived from the blood plasma circulating in the capillaries. From these in all states of activity the lymph is transuded, but as fast as it tends to accumulate in the spaces it is removed by an absorbent apparatus represented chiefly by the lymphatics. As I shall show in my second lecture, the lymphatics are aided in this work of absorption, under probably certain defined conditions, by the blood capillaries themselves. In health, therefore, the two processes of lymph-production and absorption are exactly proportional. Dropsy depends on a loss of balance between these two processes—on an excess of lymph-production over lymph-absorption. A scientific investigation of the causation of dropsy will therefore involve, in the first place, an examination of the factors which determine the extent of these two processes and, so far as is possible, of the manner in which these processes are carried out. In the second place, we must inquire how it is that, under the clinical conditions in which we know dropsy to occur, there is an upset of the balance of these two processes in favour of lymph production. My first lecture, then, will deal with the first of the two processes—i.e., Lymph-Production.

In studying the factors which regulate the production of lymph we must have criteria by which we may judge of the amount of lymph produced. To this end several methods are open to us. The most simple method, and one which was the earliest to be used, is the production of œdema. As a rule, as I shall explain later, we may look upon the production of œdema as due to increased lymph-production. Far more delicate, however, than this method is the observation of the lymph-flow from a cannula placed in a lymphatic trunk, which drains the part under investigation. Most delicate of all, but subject, perhaps, to most fallacies, is the ingenious method devised by Roy and used by Lazarus-Barlow, in which the specific gravity of the tissues is determined. The second of these methods is the one by which most work has been done and which I have used almost exclusively in my own investigations. It is evident that the only constant source of a lymph-flow must be the bloodvessels, and our first object must be to see how the amount and composition of the lymph formed in any given part may be changed by experimental alterations of the pressure and chemical composition of the blood flowing through the capillaries of that part as well as by changes in the walls of the capillaries themselves. In dealing with the functions of any part of the body we can often obtain hints as to the manner of its working from a study of its structure, and I would like, therefore, in the first place to draw your attention to some points in the structure of blood capillaries. These have long been known to consist of tubes whose walls are formed of a simple layer of flattened, nucleated endothelial cells, which are united together by a small amount of cement substance, as it is called, the lines of junction between the cells staining deeply with nitrate of silver. A Russian observer, Kolossow, has added somewhat to this simple account. According to this observer each endothelial cell consists of two parts, a hyaline "ground-plate," which immediately borders the lumen of the capillary, and outside this a protoplasmic granular part in which is embedded the nucleus. The ground-plates of the adjoining cells come in intimate contact with one another, but are in no way continuous, so that there is a linear cleft between the adjacent portions of every two cells. The protoplasmic portions of the cells, on the other hand, are continuous with one another by means of processes. If the capillary be stretched in any way the ground-plates, which are inelastic, are separated from one another, so that the clefts between them are increased in size. Hence we see in nitrate of silver specimens made under these conditions that the lines of reduced silver are much broader than in normal capillaries. Outside the capillary one finds in most instances an ill-developed adventitia which is continuous with the surrounding connective tissues. The picture thus afforded of a capillary must suggest at once that it will not be, so to speak, water-tight, but will permit of filtration between the cells, and if this were the case we would have to look upon the lymph, which is separating from the plasma circulating through the capillaries, as a filtrate. The fact that the lymph from most parts of the body contains less proteid than the blood plasma is no argument against this hypothesis. If we filter serum through porous filter paper the filtrate will have the same composition as the original serum. If, however, we take a more closely-meshed filter, such as a porous clay cell or an animal membrane, we shall find that the filtrate is considerably poorer in proteid than the original serum, the big proteid molecule being apparently unable to go through the smaller pores of such a filter. Now this hypothesis, that the lymph is to be looked upon as a filtrate under pressure from the plasma, has been the guiding idea in the most important works on lymph-formation which have appeared during this century. Though we find it more or less distinctly in the works of the older writers—Hales, Hewson, and others—it is to Ludwig and his pupils that we owe its most systematic examination. According to this hypothesis, the amount of lymph produced in any given part must be proportional to the difference between the pressure in the capillaries and the pressure in the extra-vascular spaces. In most of Ludwig's earlier experiments on the subject this condition was found to hold good. On leading defibrinated blood through a limb the lymph-production in the limb was found proportional to the pressure at which the blood was led through it. In the testis ligature of the pampiniform plexus was found to increase largely the lymph production in this organ. In the arm and in the leg extensive ligature of the veins led to an increased flow of lymph. In all these cases, therefore, an increased flow of lymph was obtained by increasing the capillary pressure of the part. Ludwig found it more difficult to prove any constant alteration of lymph production incident on vaso-motor changes, although Rogowicz, working later in Heidenhain's laboratory, found that vaso-dilatation did give a certain definite increase in lymph-production, and also showed clearly that the vaso dilatation of the tongue produced by excitation of the lingual nerve was followed by an increased lymph-production in the tongue, which might at times amount to an actual unilateral œdema of this organ.

In dealing with the laws affecting lymph-production one is hampered by the fact that in the limbs of an animal at rest there is under normal conditions no lymph flow at all, so that when we wish to study the effects of our various procedures on the lymph-production in the limb we have artificially to bring about a lymph-flow by kneading and massaging the limb. Now this fact introduces at once an arbitrary element into the experiment, and Heidenhain suggested, therefore, that the best place to investigate the truth of the filtration hypothesis would be on the lymph-flow from the thoracic duct. This writer, therefore, carried out a long series of researches on the various conditions in which the lymph-flow from the thoracic duct might be increased or diminished, and came to the conclusion that the results of his experiments were irreconcilable with the filtration doctrine, and that we must assume that the cells forming the walls of the capillaries take an active part in lymph-formation—i.e., that lymph must be looked upon as a secretion rather than as a transudation. A renewed examination of Heidenhain's experiments, combined, however, with a more thorough investigation of their conditions, has shown me that, so far from overthrowing the filtration hypothesis, they furnish the strongest arguments which have yet been adduced in its favour.

In dealing with the lymph-flow from the thoracic duct it is essential to know from what parts of the body this lymph is derived, especially since, as is well known, the lymphatics from all parts of the body, with the exception of the right upper extremity and right side of the neck, converge to pour their contents into this duct. In placing a cannula in the duct in order to collect and measure the lymph the ducts from the left side of the neck and left upper extremity are ligatured. From the hind limbs we know that in an animal at rest on the table there is no lymph-flow at all. Hence the sources of the lymph are confined to the trunk. We can, moreover, exclude the thorax and its contents, since ligature of the thoracic duct just above the diaphragm absolutely stops the lymph flow. Therefore, when dealing with the lymph-flow from the thoracic duct we deal only with the lymph coming from the abdominal viscera. As I shall show presently, the abdominal viscera, so far as their lymph is concerned, may be divided into two groups: (1) the viscera drained by the portal vein, and (2) the liver.

In testing the filtration hypothesis on the lymph-flow we have to investigate whether the flow is always proportional to the difference between the intra- and extra-capillary pressures. We may regard the extra-capillary pressure as not varying to any large extent, so that we have to see what effect is produced on the lymph by variations in the intra-capillary pressure in the intestines and the liver. The simplest experiments on the subject are those in which some large vessel is obstructed. Speaking generally, we may say that obstruction of a large vein raises the pressure in the capillaries immediately behind it, whereas obstruction of an artery will diminish the pressure immediately in front of it. If, for instance, we ligature the portal vein the arterial pressure is very little affected, while the pressure in the vein behind the ligature rises enormously. In consequence of this there is a large rise of pressure in the capillaries of the intestines and spleen, so that the spleen swells and the intestines become black from venous congestion and hæmorrhages are produced into their mucous membrane. The effect of this ligature on the lymph-flow from the thoracic duct is to increase it four or five times. The lymph also becomes bloody and its total solids are diminished. The diminution in solids is due solely to a diminution in proteids, the salts remaining the same as before, so that we have here an increased capillary pressure, causing an increased transudation of lymph containing a diminished percentage of proteid—a result which is also obtained when proteids are filtered with pressure through dead animal membranes. The presence of red blood corpuscles in the lymph is not a necessary consequence of a rise of pressure in the portal vein. If a less excessive rise of pressure be produced by ligaturing the vein, not at its entry into the liver, but just below the pancreatic duodenal vein, thus leaving a circuitous route for the blood to the liver through the anastomoses of this branch, an increased flow of lymph is produced, containing less proteids than normal lymph, but which may be quite free from blood corpuscles.

A still more striking effect is produced by obstructing the vena cava just above the diaphragm. The lymph is increased from ten to twenty-fold, and it is found that the lymph obtained after the obstruction is free from red blood corpuscles and is more concentrated than normal lymph. What is the cause of this increased lymph-flow and why is it more concentrated? To answer these questions we must find out, firstly, the source of the lymph, and, secondly, the condition of the capillary pressure in the organ or organs from which the lymph is derived. We can determine the source of the lymph by a process of exclusion. Ligation of the kidney vessels and lymphatics has no effect on the usual consequences of obstructing the inferior vena cava. On the other hand, if we ligature the lymphatics in the portal fissure which carry off the liver lymph we find that a subsequent obstruction has no effect on the lymph-flow, or, indeed, may slightly diminish it. We must conclude then that the increased flow of lymph is more concentrated than intestinal lymph. In order to answer the second question as to this increased production of lymph in the liver we must investigate the changes in the circulation produced by the obstruction. On obstructing the inferior vena cava and recording the blood pressure in the chief vessels of the abdomen we notice that the pressure in the aorta drops almost at once to a third of its previous height, whereas there is a very considerable rise of pressure both in the portal vein and inferior cava. It is probable that the effect of the rise of portal pressure on the intestinal capillaries is more than counterbalanced by the severe fall in arterial pressure, so that there is a fall of pressure in the intestinal capillaries. This conclusion is borne out by the fact that if the abdomen be open the obstruction of the inferior vena cava is seen to be at once followed by a blanching of the intestines; on the other hand, the effect of the simultaneous rise of pressures in the portal vein and vena cava must be to raise the pressure in the capillaries of the liver to three or four times the normal amount. We have, then, as the results of this experiment, no rise of pressure in the portal area and no increase of lymph-flow from the portal area, a large rise of pressure in the hepatic capillaries, and a very large increase of lymph-flow from the liver.

The only other experiment of this nature which I need describe is one in which the thoracic aorta is obstructed. The results of this obstruction on the lymph-flow are somewhat variable. In most cases the lymph is diminished to one-half or one-third its previous amount; in a few cases the lymph is unaltered in quantity or even slightly increased. In all experiments the amount of proteids in the lymph is increased. Now if we investigate the state of the circulation under these conditions we find that obstruction of the thoracic aorta causes an enormous fall of pressure in the aorta below the obstruction and a corresponding fall in the portal vein, whereas the pressure in the inferior vena cava is unaltered or in some cases even slightly increased. We must conclude, therefore, that in the intestinal capillaries the pressure has fallen considerably below its normal limits, while in the hepatic capillaries the pressure is very little altered or may even be somewhat increased. Hence the only region of the body below the point of obstruction where the capillary pressure is not much diminished is the liver. Now we find that the liver is also the sole source of the lymph obtained under these circumstances. If the hepatic lymphatics be ligatured and the thoracic aorta be then obstructed, the flow of lymph from the thoracic duct is absolutely stopped. In these three cases, therefore, the lymph production in the organs of the abdomen is found to be absolutely proportional to the changes of the capillary pressures in these organs. In another set of experiments we find that a marked increase in the lymph-flow is produced by a general rise of capillary pressure in all the organs of the abdomen. Such a general rise of capillary pressure may be produced by the injection of large quantities of normal saline fluid into the circulation, giving rise to a condition of hydræmic plethora. Under such circumstances the lymph may be increased from 50 to 100 times in amount, and may in some cases run from the cannula in the duct in a steady stream. Now, in hydræmic plethora there are two changes in the circulation which might possibly be responsible for the increased production of lymph: firstly, the change in the composition of the blood, and, secondly, the increased pressure in the capillaries of the abdominal viscera. We can decide which of these two factors is responsible for the increased lymph-flow by a very simple experiment. Previously to injecting 300 c.c. of normal saline we bleed the dog to 300 c.c., so that after the injection the total amount of circulating fluid is the same as at the beginning of the experiment. In this way we entirely avoid any rise of capillary pressure, while we have diluted the blood to an even greater extent than in the experiments in which hydræmic plethora was produced. The effect of such a simple hydræmia is to increase the lymph-flow from 3 c.c. in 10 minutes to 4 or 6 c.c. in 10 minutes, whereas if hydræmic plethora were produced the lymph would be increased from 3 c.c. to 30, 50, or 100 c.c. in 10 minutes. It is evident, therefore, that in the production of this increased lymph-flow the all important factor is the rise of capillary pressure.

Exactly the same interpretation holds good for the action of a certain class of bodies which were grouped together by Heidenhain in the second class of lymphagogues. These include bodies such as salt, sugar, potassium, iodide, &c. The injection of a strong solution of dextrose (30 grms. in 30 c.c. water) into the veins of an animal causes a considerable increase in the lymph-flow from the thoracic duct. The lymph at the same time becomes more watery than at the commencement of the experiment. Heidenhain ascribes this effect to a specific excitation of the secretory activities of the endothelial cells. The effect, however, can be explained in a much more simple fashion. All these solutions have an osmotic pressure which is considerably higher than that of normal blood plasma. A solution of dextrose that should be isotonic with the blood plasma would contain from 5 to 6 per cent. of this body. When we inject a solution containing

from 50 to 75 per cent. of dextrose it will attract fluid from the tissues until its percentage is reduced to 5 or 6 per cent., that is to say, 45 c.c. of fluid containing 30 grms. of dextrose will attract water from the tissues until its total volume is increased to 500 c.c. Of course, this estimate is merely a rough approximation at the truth, since before the sugar has had time to attract all this fluid a considerable amount of it will already have left the vessels by diffusion. As a matter of fact, however, we find that injection of a strong solution of dextrose is followed in a few minutes by a considerable dilution of the blood, caused by an increase in its volume. In some experiments of von Brasol the volume of the circulating blood was thus increased to twice or three times its previous amount; and these observations have been fully confirmed in a series of careful experiments made by J. B. Leathes. As we should expect, this increase in the volume of the circulating blood is attended by a large rise of capillary pressures in the abdominal viscera, and we have here again to decide whether it is this rise of capillary pressure or the change in the chemical composition of the blood that determines the increased lymph-flow. This question can be solved by using the same method that we adopted when dealing with the production of the increased lymph-flow in hydræmic plethora. We can entirely obviate the rise of capillary pressure if we bleed first to 300 c.c. and then inject a concentrated solution containing 18 grms. of dextrose. In this case the fluid that is dragged by the sugar from the tissues into the blood-vessels only just suffices to make up for the previous loss of blood. No hydræmic plethora is produced; there is no rise of capillary pressure, and there is no increase in lymph-flow, although an abnormally large amount of dextrose is present in the circulation. We must conclude, therefore, that the increased flow of lymph caused by injection of the second class of lymphagogues is entirely due to the rise of capillary pressure thereby induced, and is in no wise conditioned by a stimulation of the secretory activities of the endothelial cells.

There is one point in the effects of the injection of these bodies which has been looked upon as a strong argument for the secretory hypothesis, and which I must therefore mention shortly here. If we analyse the lymph and the blood at different periods after the injection we find that the amount of sugar in the blood steadily diminishes, while the sugar in the lymph first rises to a maximum and then diminishes parallel with that in the blood plasma. At a given period after the injection it is found that the lymph contains more sugar than does the blood plasma, and this fact was held to point to an undoubted secretory activity of the endothelial cells in the production of lymph. This conclusion, however, is by no means justified. The lymph flowing at any given moment from the thoracic duct does not represent the transudation from the blood at that moment, but is derived from the lymph that has been formed some time previously. If we had a solution of sugar in gradually diminishing strength flowing into a lymphatic trunk of the leg it is evident that this fluid would mix with the lymph in the other lymphatics, through which it flowed on its way to the thoracic duct. Later, the solution of sugar would have displaced practically all the lymph from these channels and would flow through the thoracic duct almost undiluted. It would take, however, some considerable time to flow from the leg to the thoracic duct, so that the outflow from the duct would represent not the fluid which was being injected into the leg at that moment, but the stronger solution which had been flowing in some time previously. If one compared, therefore, the percentage of sugar in the fluid flowing from the duct and in the fluid flowing into the leg lymphatic at different times after the beginning of the injection we should obtain a curve exactly similar to those obtained by Heidenhain after the injection of sugar into the circulation, and looked upon by him as undeniable evidence of secretory activity.

The dependence of lymph-formation on capillary pressure is not, however, the only important relationship brought to light by these experiments. The amount and composition of the transudation through a membrane depend not only on the pressure at which the transudation is effected but also on the nature of the membrane. According to the permeability of the membrane, so the amount and composition in proteids of the transuding fluid will vary. You will doubtless already have noticed that after obstruction of the inferior vena cava the pressure in the intestinal capillaries, although it probably sinks below its normal height, is yet as high as that in the hepatic capillaries. Nevertheless, we get a very small amount of transudation through the intestinal capillaries and a very large amount through the hepatic capillaries. It is evident, then, that the permeability of the liver capillaries must be very much more marked than that of the intestinal capillaries. In the same way we may compare the permeability of the intestinal capillaries with those of the limb capillaries. Normally from the limb there is no flow of lymph at all, whereas a probably equal pressure in the intestinal capillaries suffices to give rise to a steady flow of lymph. If we ligature all the veins of the leg a lymph-flow may be set up, but such a flow is incomparably smaller than that produced on ligature of the portal vein. We can, therefore, arrange the capillaries of the body in a descending order of permeability, the liver capillaries being the most permeable and the limb capillaries the least permeable. I have already mentioned how, on filtering solutions of proteids through various membranes, the percentage of proteids in the filtrate increases with the permeability of the membrane. As we have seen, exactly the same thing holds good for the capillaries in the body. The lymph in the limbs, the filtrate through the impermeable limb capillaries contains only from 2 to 3 per cent. proteids. That from the intestines contains from 4 to 6 per cent. proteids, while that from the permeable capillaries of the liver contains from 6 to 8 per cent. proteids—in fact, almost as much as the blood-plasma itself. It is conceivable that we might alter the amount of lymph produced in any organ by changing, not the intracapillary pressure, but the filtering membrane—i.e., the endothelial wall of the capillaries. Such a change can be brought about in the body by various means. A whole group of bodies has been described by Heidenhain as his first class of lymphagogues. These substances, which are mostly of the nature of albumoses, can be extracted from various of the lower animals and include leech extract, mussel extract, crayfish extract, and commercial peptone. On injecting a small amount of any of these extracts into the bloodvessels of an animal the lymph from the thoracic duct is much increased in quantity and becomes more concentrated. Now all these bodies are poisons; they alter the blood, diminishing its coagulability, and when given in sufficiently large doses cause a great fall of blood pressure in consequence of paralysis of the heart and vessels. I have shown that the changes in the circulation produced by these bodies are insufficient to account for the increased lymph-flow, but that the increased flow is due to an alteration of the capillary walls in the abdominal organs, especially in the liver. The hepatic capillaries become even more permeable than before, so that a pressure within them which is little above normal is sufficient to cause a great increase of transudation through them.

Another substance which seems to act directly on the capillary wall is curare. This body, however, differs from the class of lymphagogues just mentioned in the fact that its chief action is on the vessels of the limbs. The effect of curare in increasing the lymph-production in the limbs was noticed long ago by Paschutin working in Ludwig's laboratory. Its direct action on the endothelial wall of the capillaries can be easily demonstrated in the living frog's web. It may be seen that after the injection of curare the capillary walls become apparently more sticky, so that the capillaries become filled with a number of leucocytes adhering to their walls. A still more potent method of altering the permeability of the limb capillaries is to plunge the limb into water at 56° C. for some minutes. If a cannula has been previously placed in one of the main lymphatics of the leg it will be noticed that, in a very short time after this scalding, lymph begins to drop spontaneously from the cannula. The lymph which is thus produced is much richer in proteids than is lymph from a normal leg. The amount of lymph flowing from the leg can now be varied within wide limits by altering the pressure in the capillaries either by ligature of the vein or artery, injection of salt solution, or production of vaso-motor paralysis. By this scalding, in fact, we may reduce the limb capillaries to the condition of liver capillaries.

In conclusion, from this study of the conditions of lymph-production in the various parts of the body we must conclude that the endothelial cells of the vessels take no active part in the production, their vital activities being confined to the maintenance of their integrity as a filtering membrane with properties differing according to the part of the body in which they happen to be situated. The amount and composition of the lymph transuded in any part are determined solely by two factors: (1) the permeability of the vessel wall

and (2) the intracapillary blood pressure. The more permeable the capillary the greater is the amount of lymph transuded under any given pressure, the greater is its concentration in proteids, and the more easily is the amount of lymph altered by slight changes of pressure.

The Hunterian Oration:

REFLECTIONS ON JOHN HUNTER AS A PHYSICIAN AND ON HIS RELATION TO THE MEDICAL SOCIETIES OF THE LAST CENTURY.

Delivered before the Hunterian Society on Feb. 13th, 1896,

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[THE first part of the Oration dealt with the life of Hunter and his experience as a physician, which was shown to have been by no means inconsiderable. Dr. Newton Pitt then continued as follows:]

Until the latter quarter of last century, as Mr. Quain pointed out, there was no medical education in London. Surgeons and apothecaries were supposed to be able to pick up a sufficient smattering of their work by attending the hospital for a few months, and physicians were educated elsewhere. Some half-dozen each year took the degree of M.D. at the Universities of Oxford or Cambridge, and these alone could become Fellows of the College of Physicians of London, while a much greater number proceeded to medical degrees either abroad or at Edinburgh. Owing to the genius and energy of the elder Monro and others, the education at Edinburgh was far ahead of anything in London, and we naturally find that medical societies and periodicals flourished there before they became established in the south.

Before knowledge can be classified and accurate conclusions drawn, it is necessary that a large amount of material should be collected from many sources. The formation of medical societies and the publication of transactions and periodicals form a feature in the medical history of the last century, contrasting strongly with that of the seventeenth century. Previously to this the Memoirs of the Royal Academy of Sciences in Paris and the Philosophical Transactions of the Royal Society of London were almost the only publications in which English medical cases were reported. Many English physicians had graduated at Paris, and the Philosophical Transactions contain, up to the end of the century, over 1000 medical papers. A large number of medical men have received the honour of the Fellowship of the Society, and not the least distinguished of these was John Hunter, who contributed numerous papers, for the most part dealing with questions of natural history.

Edinburgh Medical Societies.—The School of Physics was initiated in 1720 on the lines of the University of Leyden, and in 1783 there were 400 students of medicine. The *Medical Society* was founded in 1731, the records reach back as far as 1737 and the members received a charter in 1778. This society collected and published five volumes of medical essays and observations between the years 1733 and 1744. Cullen, Hunter, Oliver Goldsmith, Fothergill and Richard and William Budd were among the members. The Society met every Saturday evening during the winter sessions when papers were read. The publications were largely contributed by the first Monro—i.e., John—whose marvellous energy and ability contributed so essentially to the success of the school. He contributed papers on the nutrition of fœtuses, on the diseases of arteries, on the lacrymal canal, on white swelling, on herniæ, on the obstruction of ureters by stones, on ulcers, on procidentia uteri, on the preparation of bodies for dissection, on the anatomy of the lower jaw and of the duodenum, on chalybeate waters, and on new instruments, a range of original work unequalled at that time in this country. *Medical and Philosophical Commentaries* by a society of physicians in Edinburgh were edited by Dr. Andrew Duncan and 20 volumes were issued between 1773 and 1799. They were continued as the Annals of Medicine till 1804. The publication consisted of reviews of books, original medical observations, and medical news. They form the most valuable contemporary record of medical activity of London quite as much as of Edinburgh. The *Philosophical Society* published three volumes under the title "Essays and Observations, Physical and Literary," between 1754 and 1771. The *Æsculapian Society* was instituted in 1774, and consisted of five physicians and ten surgeons, who met and supped together once a month. The *Edinburgh Harveian Society* was founded in 1752 and the *Abernethian Society* in 1785. The *Royal Physical Society of Edinburgh* was founded in 1771, incorporated in 1788, and merged with the Chirurgico-Medical Society in 1796. The *Royal Society of Edinburgh* dates from 1783; the *Hibernian Medical Society*, Edinburgh, from 1791.

The only medical society in *England* outside London was the Medical Society of Colchester, instituted in 1774.

An examination of the history of the societies which were started in London shows that each society owed its origin to the energy of one or two men, and in many instances the society faded away at their death. Until the latter part of the century there was no education for students in London beyond that given by a few private lecturers. As late even as 1783 we learn from the Medical Register that the following was the complete list of lecturers in London. Anatomy: Mr. W. Cruickshank, at the Hunterian Museum in Great Windmill-street; Dr. R. Maclaurin, at his house in Mark-lane; Mr. Blizard, at the London Hospital; Mr. John Sheldon, at his house in Great Queen-street; and Mr. Henry Cline, at St. Thomas's Hospital, who had also been appointed Professor of Anatomy to the Corporation of Surgeons in 1781. Surgery: Mr. Percival Pott, F.R.S., at St. Bartholomew's Hospital; Mr. John Hunter, F.R.S., in the Haymarket; and Mr. J. O. Justamond, F.R.S., in Macclesfield-street, Soho. Physic: Dr. Fordyce, at his house in Essex-street and at St. Thomas's Hospital; Dr. Saunders, at Guy's Hospital; and Dr. Maddocks, at the London Hospital. Most of the lectures, it will be seen, were not delivered at the hospitals, but at the lecturers' houses, where several of them had large schools; and from Mr. Rivington we learn that the school of the London Hospital first offered a complete course of education in 1785 and commenced to give clinical lectures in 1792. From the minutes of the Corporation of Surgeons we learn that their Professor of Anatomy gave a yearly course of six lectures on the muscles and of six on the viscera, the proposal that he should also give three on the bones having been rescinded.

The following appear to be the chief of those to whom the new medical societies were due:—William and John Hunter, John Sheldon, Dr. Feart Simmons, Dr. Saunders, Dr. Fothergill, and Dr. Lettsom. The societies may be divided into two classes, those started by practitioners for the purpose of publishing cases and those started by teachers as a means of keeping in touch with students and junior practitioners and of teaching them how to report and discuss cases. In most instances the possession of a library, from which the members could borrow books, was considered a very essential and important feature. In the student societies, at any rate, the money was raised by innumerable fines rather than by fixed subscriptions.

The Fellows of the Royal College of Physicians used to meet from time to time to discuss medical questions and they issued six volumes of Medical Transactions between the years 1772 and 1820.

The societies associated with William Hunter were the two medical societies of 1753 and 1764. They were both small; the former consisted of physicians and the latter of licentiates. The first society published at intervals the volumes of medical observations and inquiries, and nothing more was heard of the societies after Dr. Hunter's death.

The Medical Society (1).—The first medical society in London was founded in 1752 by some hospital physicians who met together for their mutual improvement in the practice of their profession once a fortnight on Monday evenings at the Mitre Tavern, Fleet-street. After some time they decided to form themselves into a society for collecting and publishing "Medical Observations and Inquiries," six volumes of which were issued between the years 1757 and 1784, the first paper

being dated 1753. The preface to the first volume states that "it is much to be regretted that the medical essays and observations of the Medical Society of Edinburgh have been discontinued, and that the present may be in some degree considered as a continuation of that valuable work." The chief contributors were Dr. J. Fothergill (whose museum Dr. W. Hunter bought), Dr. W. Hunter, Dr. G. Macaulay, Dr. S. Pye, Dr. C. Blephane (who died in 1762), Dr. W. Fordyce, and Dr. Gowin Knight. Dr. Hunter was the chief contributor; he was an original member and became the most influential. The society, which then consisted of seven physicians (six of whom were Fellows of the Royal Society), ceased to exist in 1784, after Hunter's death. Among the more interesting contributions I may refer to a case of Hernia of the Abdominal Viscera into the Thorax, reported by Dr. Macaulay; an excellent case of Pharyngeal Pouch, by Mr. Ludlow; a typical case of Osteo-malacia; and to papers by Dr. Fothergill on the Influenza Epidemics of 1758, 1775; on the objections to Venesections in Apoplexy; and on the Value of Ipecacuanha in Dysentery. Fothergill also gives one of the first accounts of Sick Headache with Visual Disturbances and Fortification Figures, evidently drawn from personal experience; we know from his "Life" that he was constantly incapacitated by its attacks. Dr. Hick, in 1768, reported a case of Strangulation of Intestine under a band, about which he consulted John Hunter, who explained that it had probably arisen from adhesion of the omentum to both the mesentery and the ileum, and was able to show him two similar specimens of bands. In the same volume a case of Cæsarean section is reported, which was performed by Mr. Thompson of the London Hospital, assisted by Mr. Hunter; five years later William Cooper asked Hunter to perform the operation for him and remarks that the whole was conducted with the utmost coolness, humanity, and skill. There is no lack of evidence among contemporary records, of the high value which was set upon Hunter's practical surgical skill by practitioners. In one case he removed a tumour from the side of the neck as large as a head, and by bringing the edges of the skin together the whole nearly healed by primary union—no slight feat in those days.

Dr. Routh, in his Oration in 1859 before the London Medical Society, dealing with its history, states that there is a copy of the laws of this 1753 society in the British Museum which gives John Sheldon as the President for the years 1779 to 1782. On examination I find that this is an error, and that the laws referred to are those of the Great Queen-street Society, to which I shall allude later on. As the 1753 society consisted only of seven somewhat senior physicians it is improbable that there would be anything but the briefest manuscript note of their proceedings.

The Medical Society (2).—Another society of physicians with which Dr. William Hunter was connected, was instituted about 1764, and met once a fortnight on Wednesday evenings at Old Slaughter's Coffee House for the purpose of discoursing on the prevailing diseases. The members were Licentiates of the Royal College of Physicians of London. In 1783 there were twenty-three members, including Gaskshore and Robert Bromfield, Hunter's colleagues at the British Lying-in Hospital, George Fordyce of St. Thomas's Hospital, and William Saunders of Guy's Hospital, after which date I have not been able to trace the society. The society was originated by Dr. Alexander Russell, formerly of Aleppo. The members also dined together once a quarter at the Crown and Anchor Tavern in the Strand. The immediate object which those who started the society had in view was to oppose the proposal that Licentiates should be admitted upon an examination in English, which, it was thought, would lower the standard.

The Physical Society.—This society appears to have been instituted at Guy's Hospital in 1771, according to the stamp which is impressed on the books belonging to their library, most probably by Dr. Saunders, who gave the first course of lectures at the hospital in 1770. The book of the laws of the society is dated 1775. The early minute books of the society have for many years been lost sight of, but I have been fortunate enough to discover the volumes from 1783 to 1820, with the exception of those for the years 1786 to 1788 and 1798 to 1804. As was the case with other societies, it would appear that when they were first initiated the members met informally and did not keep minutes of their proceedings. The first existing entry is for Oct. 4th, 1783, with Mr. Cline in the chair, which headed the first meeting of the second session; while in 1792 we find the secretary making a note that the sessions should have been counted from 1775, and in future this was done. It is probable, therefore, that the meetings became much more businesslike and formal in 1783, but had been taking place for some years. The meetings appear to have been held every Saturday evening from October to May in the theatre of Guy's Hospital, and the society consisted of ordinary, honorary, and corresponding members. The former were required to attend every evening on pain of being fined, and in turn to read a dissertation before the society. After having read two dissertations and attended regularly for two sessions they could be elected honorary members and were freed then from responsibilities. Those physicians, surgeons, and apothecaries who had already distinguished themselves were at once eligible for election as honorary members. The society possessed a library which was supported by a contribution of sixpence from each member at every meeting and of a shilling if he were absent without good excuse. The rules, it is seen, are much more stringent than those that any society enforces at the present time. In the earlier minute-books the most important contributors were Mr. Cline, Mr. Hewson, and Mr. Astley Cooper, who had all been pupils of Hunter; Dr. Babbington, Dr. Saunders, Dr. Lowder, and Dr. Skeete, who were all ultimately on the staff of Guy's Hospital; while Dr. Wells, Dr. Lister, and others of the staff of St. Thomas's Hospital also joined the society. The society also included most of the general practitioners in the neighbourhood and a few from distant parts of the country. Dr. Lettsom, who was a member, was a donor of books to the library.

It is not surprising that there should be frequent reference in the minute books to Hunter's methods of treatment and to his views on many questions, seeing that so many members had been his pupils. Thus, on December 24th, 1785, we read that Dr. Saunders reported an experiment which Mr. J. Hunter had performed for the cure of the popliteal aneurysm. "An incision was begun a little below the middle of the thigh and continued three inches downwards in the course of the artery, and four ligatures were made on the artery above its dilatation with the view to obliterate the aneurysm." This refers to Hunter's first and celebrated operation in this region. Several cases were reported during the next few years successfully treated by the method thus laid down by Hunter. The high estimation in which Hunter was held in this society is shown by the fact that the name of no other surgeon is quoted constantly, while his opinion is several times given as authoritative.

At each meeting the medical cases of interest were first described and then a dissertation was read and discussed. In 1783 the treasurer of Guy's Hospital, Mr. Harrison, was elected a member of the society, and when he was visiting his sister Mrs. Cripps at Cirencester he made the acquaintance of Dr. Jenner, who read one of his earliest papers on Vaccination, at his invitation, before this society. I have not found the entry of this in the minute book, but those for the period 1798 to 1804 are unfortunately missing. Three prize dissertations on the subject have, however, been preserved, one by Dr. John Power of Market Bosworth in the year 1799, but neither the writer nor the date of the others can be traced, but we know that Mr. Allen, the founder of the firm of Allen and Hanburys, attended a meeting in 1802 with Mr. A. Cooper to hear such a paper. Of the numerous cases recorded in the minutes there is but little that is of interest now; on various evenings many different opinions were brought forward as to the value of styptics, such as Ruspini's and agaric, and numbers of cases are reported which had been treated by digitalis and by bark, which latter was largely introduced into this country by Dr. Saunders, Dr. Relph, and Dr. Skeete, members of the society. The number of cases of hydrophobia which were brought forward is noteworthy.

The society appears to have flourished for many years, 168 ordinary members were elected in the years 1783–1785, and judging from the subscriptions collected each evening it would appear that probably the attendance was often over forty, while the amount of fines exacted at each meeting from absent members or from those who had failed in their observance of the rules frequently amounted in the latter years of the century to over £5.

The Pupils' Physical Society in the early part of the century branched off from this one and still continues to flourish; it may, therefore, claim to be a descendant of one

of the oldest societies in London. The original society gradually waned as the numerous medical societies developed and finally ceased in 1852.

In 1798 a volume appeared entitled "Medical Records and Researches, Selected from the Papers of a Private Medical Association." It was printed by Cox of St. Thomas-street in the Borough, and the papers were contributed or collected by Astley Cooper, William Babbington, and John Haighton, who were three out of the six presidents of the Physical Society for that year. Within the next year or so the two former were elected on the staff of Guy's Hospital, and soon became busy with practice, and no further volumes were published. It is not improbable that the Physical Society did publish some of their material, as a printing committee was elected annually, but from a passage in the life of Astley Cooper I conclude they did not publish this volume. In this Cooper published two cases of hernia of the abdominal viscera into the thorax and some observations and experiments on the occlusion of the thoracic duct. Haighton's most important paper described some experiments which he had been induced to make owing to his opinion that the fatal results of Cæsarean section might be due to the admission of air to the abdomen. He performed some laparotomies on animals with the abdomen under water, and then applied an adhesive composition to the cut edges, and outside this a bandage. He obtained complete recoveries. However, not being quite satisfied, he repeated the operations in the air and obtained equally good results, thus convincing himself that the ill results ordinarily obtained were not merely due to exposure to the air.

The Physico-Medical Society.—There is in the British Museum a copy of the laws of the Physico-Medical Society of London, established in the year 1771. We read: "In the year 1772 several medical gentlemen residing in London associated themselves for the purpose of submitting their respective opinions to the examination and correction of each other." At first the name adopted was the Philosophico-Medical Society. The volume gives the laws as revised, arranged, and amended in 1774, when this name was discarded. The council consisted of four presidents, a treasurer, two secretaries, and nine members. The society met on Monday evenings at 7 o'clock for nine months in the year; from 7 to 9 P.M. for a debate on a set subject each night, and the members dined together once a year. The annual subscription was a guinea. They possessed a library and members could borrow books. I have not been able to identify this society with any of the others, nor is it clear where they met.

The Medical Society of London (*Bolt-court*).—The Medical Society of London was instituted in 1773 and, according to the Medical Register of 1783, met every Tuesday evening at 7 o'clock at Crane-court, Fleet-street. It at first consisted of thirty physicians, thirty surgeons, and thirty apothecaries, and the meetings were held in the house of Dr. Lettsom, who was in every way a most liberal benefactor to the society, giving donations of money, books, and finally the premises in Bolt-court. He was practically the founder of the society. Dr. Fothergill was also a munificent donor of books. In 1784 the society was nearly wrecked by violent party disputes over the candidatureship of two of its members, Dr. Cooke and Dr. Whitehead, who was President at the time, for an appointment at the London Hospital. After 1784 two gold medals were awarded biennially for original essays, but judging by the meagreness of some of the successful essays there must often have been but little or no competition. In 1794 the attendance at the meetings was often very small, and sometimes only four members were present—as a result they tended to drift into gossip rather than business. The society somehow got under the thumb of Dr. James Simms, who succeeded in being re-elected President for over twenty years. They agreed to pay him and his wife an annuity of £30 a year, and in 1800 paid him £500 for a large number of his books. The manner in which Dr. Simms managed the society gave great offence and led to the secession of a number of members, who formed the Medico-Chirurgical Society in 1806. The society in 1850 amalgamated with the Westminster Medical Society and still flourishes at Chandos-street. Six volumes of the "Memoirs of the Medical Society of London" were issued between the years 1792 and 1805. It is clear that at first Dr. Fothergill and Dr. Lettsom were the influential members.

The Medical Society (*Great Queen-street*).—This medical society was instituted at the Anatomical Theatre, Great Queen-street, Lincoln's Inn Fields, on Dec. 9th, 1779. The members met every Tuesday evening at 7 o'clock from October to May. Medical news and cases were brought forward from 7 until 8 o'clock, when the dissertation for the evening was read out by the author, and afterwards by the president, paragraph by paragraph, for discussion. The president wore his hat while in the chair. Dissertations were written by each member in turn, and any member failing to write one was fined 10*s.* 6*d.* Members absent without having sent an apology were fined 2*s.* 6*d.* There are copies of the laws of this society and the list of members in the libraries of the British Museum and of the Royal Medical and Chirurgical Society, dated 1783 and 1784.

This society was started by John Sheldon in connexion with his Anatomical School at Great Queen-street. Sheldon was also surgeon to the General Medical Asylum in Welbeck-street. The society possessed a library, and awarded a diploma to members who gave proof of sufficient medical ability and had written two dissertations. The greater number of the members were practitioners, only a few being students. In 1783 the society consisted of twelve foreign and seventeen honorary members, with eighty-seven ordinary members who were required to attend the society regularly. Old members kept their names on the book when they moved into the country as corresponding members. Mr. Sheldon was perpetual president, and each year from one to three other members were also elected as presidents. Sheldon and Cruikshank, I learn from Mr. D'Arcy Power, were rival teachers under Dr. William Hunter at the Great Windmill-street School; both were teaching anatomy and both were working at the lymphatic system. Owing to some difference with Hunter, Sheldon left and started an anatomical school for himself at Great Queen-street. About the time of Hunter's death Dr. Johnson wrote to Sir Joshua Reynolds in favour of Cruikshank for the post of Professor of Anatomy, which Hunter had held at the Royal Academy, but Sheldon was elected, and retained the office till his death in 1808, when he was succeeded by Anthony Carlisle. Sheldon was a great patron of æronauts and was the first Englishman who made an experimental ascent. In 1788 he was compelled to resign his surgical appointment at Westminster owing to overwork. This medical society was evidently closely associated with his teaching and was under his control; the majority of the members, however, were practitioners. I have not been able to trace the society later than 1784; apparently it ceased when Sheldon gave up his house, and it would appear that within a few years Wilson, who had been Cruikshank's assistant, was lecturing on surgery in Great Queen-street in probably the same house. This society was a rival and opponent of Hunter's Lyceum Medicum, with which Cruikshank was connected.

The *Society for the Improvement of Medical Knowledge* was established by Dr. Foart Simmons and others in February, 1782, for the purpose of collecting useful essays and observations for publication. Dr. Simmons had studied at Edinburgh, where such societies were flourishing. He had just been appointed physician to St. Luke's Hospital, and became the most distinguished alienist physician of his day. In 1803 he was called in to attend George III. Meetings of the society were held once a fortnight, on Tuesday evenings, at Old Slaughter's Coffee-house in St. Martin's-lane, when papers were read. There were formal meetings once a quarter, when candidates were proposed at one meeting and balloted for at the next. The society consisted of sixteen members, with a president, treasurer, two secretaries, and a committee for revising and selecting papers for publication. They published two volumes of *Medical Communications* in 1784 and 1790 respectively, containing thirty-one papers. The following are among the more interesting. A Careful Post-mortem of what is obviously a case of Cancer of the Œsophagus, by John Hunter, who looked upon the condition as one of ulcer. Nothing is more striking in reading the records of this time than the lack of system in the post-mortem examinations: one or two organs which were suspected were examined, but too often no note is made as to the condition of those which had probably been the real source of the illness. Hunter often gave full and accurate reports, but rarely examined all the organs. A most remarkable case of a sword wound of the stomach which recovered is reported by Dr. Carmichael Smyth, physician to the Middlesex Hospital. The patient was fed for weeks per rectum with from four to five pints of broth daily, which was retained. Mr. Henry Watson, senior surgeon to the Westminster Hospital, proposed enterectomy for cases of

hernia in which the bowel was found to be gangrenous. He showed, by a successful operation on a dog, that by making a solid cylinder of isinglass jelly, which he inserted into the two cut ends of the intestine, they could be brought together and united by a continuous suture with a Glover's needle and thread. Dr. Willan records a case of fasting which lasted for sixty days, the man only taking water and two oranges each week.

In the library of the Royal Medical and Chirurgical Society there is a manuscript which belonged to Dr. Lettsom entitled "A Scheme for Instituting a Society under the title of the Society of Physicians of London, instituted for the Improvement of Medical Knowledge and also for building a New College of Physicians, 1782." It is somewhat uncertain whether the date is not a recent addition in another handwriting. If this refers to the same society the manuscript, I should conclude, was written by Dr. Foart Simmons; but as the writing appears to be that of an old man, and Simmons would be about thirty, it is almost certainly quite distinct. The object for the foundation of the society was to organise the Licentiates of the College together and to raise funds to build a new College of Physicians. The Licentiates included many men of the greatest ability and with the largest practices; but unless they were graduates in medicine in the universities of Oxford or Cambridge, and had, therefore, conformed to the Test Act, they could not become Fellows. They had shortly before lost an action which they had brought against the College before the Court of King's Bench, and hence the bitter feeling which is expressed. The scheme commences by stating that every member is to subscribe £50, and those whose fortunes enable them are expected to be more liberal. Public-spirited persons, particularly dissenters of different denominations, are to be applied to for assistance; the regulations included the formation of a magnificent library, but nothing seems to have come of this great scheme.

Society for the Improvement of Medical and Chirurgical Knowledge.—This society issued three volumes of Transactions between 1793 and 1812. The society was founded by John Hunter and George Fordyce, senior physician to St. Thomas's Hospital, in 1783, which is the date of delivery of the first paper, but none were published till ten years later. The society originally consisted of nine members, with power to increase up to twelve, but not beyond, and only eighteen, whose names are given in the minute book, joined during the thirty years of its existence. They met once a month at Slaughter's Coffee-house, and after dinner read and discussed the papers. Members to be eligible were required to be living in the neighbourhood so as to attend regularly, and they were required to be physicians or surgeons of five years' standing, or to be on the staff of St. Bartholomew's, St. George's, Guy's, or St. Thomas's Hospitals. It is interesting to note that the first volume of Transactions was published in 1793, the year of Hunter's death, and after 1812, when the last volume was issued, the society continued merely as a club of ten, who dined together once a month. They had been, according to their last secretary (Mr. Benjamin Brodie), a very exclusive society and finally dissolved in 1818. The minute book is now in the Library of the Royal Medical and Chirurgical Society. The chief contributors to the Transactions were John Hunter, Dr. John Hunter, physician to the army, Dr. G. Fordyce, Dr. Jenner (paper on the preparation of tartar emetic), Matthew Baillie, Everard Home, Anthony Carlisle, and John Clarke, most of whom it will be seen were Hunter's pupils. Dr. Wells was the most remarkable and influential man in the society after Hunter's death.

Hunter's communication on inflammation of the internal coat of veins is one of great importance. He pointed out that it occurred wherever there was severe inflammation in the neighbourhood of large veins, whether as the result of a compound fracture, an accident, or a surgical operation, but that it may also occur after venesection, and insists upon the importance of obtaining primary union. He points out that a thick, dry compress of linen or lint is the proper dressing for venesection or for compound fractures so as to allow dry scabbing, but that if the parts are kept moist or prevented by plasters from evaporating they always suppurate and the vein is then liable to inflame, and if so it will become occluded. If the surgeon suspects suppuration to have taken place he must keep a compress on the vein higher up. Hunter also reports one of the first cases of artificial feeding (a case of melancholia) by an œsophageal tube, which was suggested to him by a tube he was using for injecting liquids into the stomachs of animals. The difficulties might have appeared to any one but Hunter insurmountable. A probang was inserted in a fresh eel-skin and tied in above and below the sponge. A slit was then made in the skin just above the sponge. The probang was passed into the stomach and a wooden pipe with a bladder attached was pushed over the probang. The food and medicine were put in the bladder and squeezed down the tube. In this way the patient was fed until he recovered. We also read in Hunter's own case-book of a patient whose pulse failed suddenly when the spermatic cord was tied during the removal of the testicle for the treatment of a large hydrocele. Hunter at once injected into the stomach with a crooked tube and syringe (such as he was in the habit of using for injecting fluids into the stomachs of animals for the purposes of experiment) volatile cordials and then laid the body before the fire, but without avail.[1]

Lyceum Medicum Londinense.—This society was established under the patronage of John Hunter and Dr. George Fordyce in January, 1785. The meetings were held every Friday evening from 8.30 P.M. to 11 P.M. between October and May, in Hunter's lecture room, which was situated between Castle-street and the east side of Leicester-square. According to Chevalier, Hunter gave them the gratuitous use of his lecture room and generally displayed for their benefit the more interesting and instructive of the additions to the museum. Among the receipts of Hunter's executors, an abstract of which was published by Dr. Finlayson.[2] I notice a sum of twenty-four guineas was received in September, 1793, from this society, but no further payment was made within the next year or so; it is not clear, therefore, for what this was paid, possibly for carpenters' or printers' work, and not for rent. The Royal College of Surgeons of England possess a copy of the rules of the society and a list of members from the foundation to the date of publication, 1792, from which we learn the following particulars. The society consisted of honorary, corresponding, and ordinary members, the latter being divided up into three classes.

The six honorary members were the following teachers: John Hunter, lecturer on Surgery in the Haymarket; George Fordyce, lecturer on Physic at Essex-street; William Saunders, lecturer on Physic at Guy's Hospital; William Osborn and Thomas Denman, lecturers on Midwifery at Leicester-square; and William Cruikshank, lecturer on Anatomy at the Hunterian Museum, Great Windmill-street; the corresponding members (21) being teachers or members of hospital staffs in the country. The ordinary members consisted of: Class 1. Those who had taken a qualification or were in practice; of these there were 78, and among the names may be noted the following: Baillie, Home, Adair, J. Clarke, Pearson, Ford, Cleghorn, Babington, James Curry, Abernethy, Astley Cooper, and Thomas Young. Class 2, which numbered 314, consisted of those who had attended a hospital and one course of lectures on Anatomy and the practice of Physic. Class 3, numbering only 7, consisted only of those who were commencing their studies. The two former were required, in turn, to read a dissertation which, on the following Friday, was read out by the President and discussed. The first hour of each meeting was devoted to the narration of medical cases, which were entered in a book, and the more important were sent to Dr. Foart Simmons to be published in his Medical Facts and Observations. The society possessed a library and presented a five-guinea gold medal annually for the best dissertation on a set subject.

Such a society was a very great educational centre, as each member was required to observe and inquire for himself; fines were inflicted on a member who left a meeting without publicly standing up and asking permission; and for each time he failed to attend the meetings until he had read a dissertation, after which he attended at his convenience. No member was allowed to leave London without writing for permission. There was an entrance fee of a guinea. Jenner, we learn, attended a meeting of this society on April 22nd, 1801, when he was admitted a Fellow.[3] But little is now known about the society; the Index Catalogue of the Surgical General Library, U.S. Army, possesses the Laws for 1793. The society had ceased by 1805 to hold any meetings. In that year Sir C. Mansfield Clarke, Sir B.

[1] Vol. iii., p. 104.

[2] Brit. Med. Jour., 1890, vol. i., p. 758, and Library of the Royal College of Surgeons of England.

[3] Life of Jenner, vol. i., p. 449.

Brodie, Dr. Baillie Clarke, and a few other members of the society established the Westminster Medical Society for the purpose of promoting intercourse between students and teachers, and the members of the old society were elected honorary members. After a somewhat chequered career this society amalgamated with the Westminster Society, and later both with the Medical Society, which now flourishes.

Hunter's influence was paramount in the three following societies: (1) The Society for the Promotion of Medical and Chirurgical Knowledge, which was a small society of physicians and surgeons founded in 1783, consisting of nine or ten members, who dined together and discussed their papers, of which they published three volumes after the death of Hunter; (2) The Lyceum Medicum Londinense, a large society which met at Hunter's Museum and numbered 350 members, including, probably, all those who attended Hunter's lectures on Surgery, Cruikshank's on Anatomy, Saunders' on Physic, and Denman's on Midwifery—i.e., probably a majority of the students in London; and (3) The Physical Society, which met at Guy's Hospital and was attended by the students of the United Hospitals—Guy's and St. Thomas's—and by the practitioners in the neighbourhood. It numbered more than 200 members. It is not possible now to determine with certainty who were the founders of the latter society, but in 1783, in the earliest remaining record, we find the most influential members were pupils or friends of Hunter, who all looked up to him as the greatest living authority on all questions. Thus at this period Hunter influenced more or less directly some 500 students and practitioners, and his museum was more especially at the service of the Lyceum; the only other society was Sheldon's, which contained, however, very few students. The Lyceum, the Physical, and Sheldon's Medical Societies were not included in the Medical Register for 1783, probably because they were not limited to practitioners and were looked upon as merely part of the educational machinery of the metropolis. It is not to be wondered at, that twenty years later, Hunter's were the views accepted by the leaders of surgery in London and that he had revolutionised the studies of surgeons; and there can be no question that the change had largely been brought about by means of these societies. When, after years of isolation, the schools of London and Paris compared notes at the end of the war it was found that the English surgeons were far ahead of their *confrères*, thanks to Hunter, but that the converse was the case with regard to medicine.

The Society of Physicians.—Dr. S. Foart Simmons, who compiled the Medical Register of the last century, which was issued in the years 1779, 1780, and 1783, giving a list of all the medical men and of the societies of Europe, also edited the *London Medical Journal* for a society of physicians. Eleven volumes were issued between 1781 to 1790, and the publication was continued as *Medical Facts and Observations* from the year 1791 for six volumes.[1] The *Journal* was published monthly and consisted of reviews of all the new European medical books, of original papers and of medical news, being on the same lines as the medical and philosophical commentaries of Edinburgh, and together they give us the best epitome of the current medical opinions of the time. I have not been able to learn more about this society beyond what is stated in the first volume. It appears that the society had occasionally met together to converse on medical subjects, and at the instigation of Dr. Simmons, who undertook to act as editor, they agreed to set on foot this monthly publication.

Not much can be learnt of the Middlesex Hospital students' medical society, which dates back to 1774, but of which records have not been preserved. The students appear to have met twice a week in the physicians' room. The Abernethian Society of St. Bartholomew's Hospital commenced at the end of the century.

In bringing before you this evening these remarks about Hunter and the history of the medical societies of London, I trust we all realise how great a debt we owe to the Hunters (William and John) and to John Sheldon for instituting debating societies for the purposes of medical education. We can afford now to read with amusement a pamphlet which is entitled, "Reflexions on a Letter addressed to the Governors of St. George's Hospital by John Hunter in 1792." After abusing Hunter for his lack of education, &c., the writer says: "Your disputing societies, several varieties of lectures in a day, and a squint at an operation are the fashionable attendances of the modern student. Since the Medical Tea-sipping Society was commenced mankind has been classed to view the wonders of your museum and the world indulged with a volume of your notions at the common price. It is ridiculous to observe how this tea-kettle invitation has spread. An apothecary may now take his tea gratis and have a game of whist for only the price of the cards every evening in the week, if he keeps a regular list of the bread-and-butter manufactories."

[1] There are seven volumes in three in Guy's Hospital Library.

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GLEANINGS FROM SURGICAL PRACTICE.

BY THOMAS BRYANT, M.CH., F.R.C.S. ENG. & IREL.,

CONSULTING SURGEON TO GUY'S HOSPITAL; PAST PRESIDENT OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, ETC.

VI.[1]—ON OBSTRUCTED ARTERIES.

EVERY practitioner of medicine or surgery is familiar with the fact that an artery in its continuity may become obstructed, although when this condition is discovered there may be some difficulty in making out its precise cause. Every student of pathology and observant visitor to our college and hospital museums will know that this obstruction, partial or complete, may be brought about by diverse causes, and bedside experience will soon teach him that the results of arterial obstruction are very variable. As time passes and experience increases he will have learnt that an artery may become the seat of inflammation, ulceration, or sloughing, either as a result of local injury or from the extension of inflammation from some neighbouring tissues, and be led to appreciate the fact that any action, whether called inflammatory or otherwise, which alters the nutrition of the inner coats of an artery may help to encourage the coagulation of the blood in that artery, and as a consequence bring about thrombosis in the vessels at the part affected with all its attendant dangers. He will, moreover, have been led to recognise that chronic changes may so insidiously go on in an artery as to bring about a narrowing of its lumen even to its closure, which one pathologist will describe as being due to a congenital condition and another to a form of local arteritis called obliterative.

[1] Nos. I., II., III., IV., and V. were published in THE LANCET of Nov. 2nd and 9th, Dec. 7th, 1895, Jan. 11th, and Feb. 8th, 1896, respectively.

The following two cases are striking examples of this condition and in both an aortic aneurysm existed. In one, a young patient, the aneurysm was situated below the contracted orifice of the subclavian artery; in the other, an old patient, the arch of the aorta with the innominate artery was its seat. In neither of the cases was the obstruction recognised during life; its true cause was made out only after death.

CASE 1. *Aneurysm of the aorta giving rise to laryngeal symptoms; apnœa and sudden death; almost complete closure of the orifice of the left subclavian artery.*—A healthy-looking, sensible, married, childless woman aged twenty-two years came under my care at Guy's Hospital on July 5th, 1869, suffering from dyspnœa which came on at uncertain intervals and had existed for two years. Her trouble was supposed to be laryngeal. When admitted she was tranquil and apparently well, but she dreaded an attack, for she felt sure she would die in one. On a careful general examination, as nothing wrong could be made out except an absence of pulsation in the arteries of the left arm, which was otherwise normal in size and in temperature, the question of her dismissal from the hospital was raised, but she seemed so truthful and alarmed at her condition that it was arranged to keep her for observation. Within twenty-four hours of her admission and at night an attack of dyspnœa came on which so speedily became intense and threatened death that tracheotomy was performed, but as the tube was being introduced death ensued. At the post-mortem examination, made by Dr. Moxon, an aneurysm the size of a plum was found to be pressing upon the left side of the trachea and left bronchus so as to flatten both. It sprang from the right side of the descending aorta about one inch and a half below the orifice of the left subclavian artery, and it had an oval mouth which measured half an inch by three-fourths of an inch. The arteries generally were healthy, but marked by many semi-cartilaginous patches of thickening, one having an atheromatous centre. The left subclavian artery was almost entirely closed at its mouth by constriction and thickening. The ovaries were shrivelled and the Fallopian tubes were closed at their ends, bent down and adherent to the ovaries. The neck of the uterus was abraded and its body was large and flaccid. The kidneys were natural.

CASE 2. *Aneurysm of the aorta and innominate artery; ligature of the right common carotid; death on the fourteenth day; obliteration of the origin of the left subclavian artery.*—A man aged fifty-eight years came under my care in January, 1877, with a large aortic and innominate aneurysm which was pressing upon the trachea and œsophagus and giving rise to great pain and loss of voice. It had been coming for about a year. It was reported at the time that the radial pulse of the right or affected side was much stronger than that on the left and that the pulses of the left arm were very feeble. I applied a ligature to the right common carotid and no difficulties were experienced; indeed, everything seemed to be going on well and the patient expressed himself as being greatly relieved, but on the twelfth day he sank. At the necropsy, as made by Dr. Moxon, the aneurysm was found as described and the parts connected with the operation were all healthy.[2] The origin of the left subclavian artery was obliterated. The obliterated part was not converted into a cord, but was longitudinally wrinkled as if incompletely filled with something. On opening this part it was found to contain some fibro-cellular-looking material of loose texture adherent in part to the wall of the artery and yet pretty easily separable in parts to show that it was quite a separate material to the arterial wall. It might have been organised clot, but if so it is difficult to explain the condition of the orifice of the subclavian—a mere pouch without a trace of aperture into the artery. The vessels were all normal which arose from it beyond the obliterated spot except one very large trunk half as large as the subclavian itself, which must have been from its position the inferior thyroid. The left internal jugular vein, with the left subclavian and axillary veins, were plugged by recent adherent thrombus. The left innominate vein was free. The viscera were healthy.

The most common pathological changes met with in arteries are those known as the calcareous and atheromatous; through the former the vessels become more or less rigid and inelastic, and through the latter the formation of most aneurysms which are not of traumatic origin is to be ascribed. At the present moment, however, what is of special interest is as to how these changes in the coats of an artery may lead up to its occlusion. To this aspect of the matter I shall devote a few lines. It should be understood that an artery the subject of either of these two affections mentioned may become occluded in at least two ways. In the one case, at the seat of either some calcareous deposit or atheromatous ulcer as it is called a clot may form, the fibrin from the blood as it flows onward being as it were whipped by the rough surface of the diseased artery into a clot, which enlarges so as to form a thrombus big enough to occlude the artery. In the other case the clot is formed in the same way, but instead of enlarging where it was formed it becomes dislodged by the blood force and is carried forward in its stream along the narrowing arterial channels to some more or less distant position past which it is too large to travel, and there as an "embolus" becomes impacted so as to occlude the artery, the favourite position of this embolic plugging being the bifurcation of a vessel. In some cases, again, portions of calcareous or atheromatous tissue doubtless help to form the clot and in small vessels even to form the embolus. Certain examples of senile gangrene are unquestionably due to this cause.

All examples of embolic plugging are not, however, to be thus explained. Some are associated with certain blood conditions found in fevers, such as scarlet fever. I have had three cases of this kind in young women under my care in which the popliteal artery was the vessel plugged. In all gangrene followed as a consequence of the obstruction, and in all amputation was performed, with a good result in two; the third, a girl aged fifteen years, was too feeble to recover. In the majority of cases of embolic arterial obstruction heart disease is its true cause. In some the heart affection is of an acute nature, in others of a chronic. What is known as septic or malignant endocarditis is the most common. The embolus in all these cases is of a fibrinous nature; it forms upon one of the valves and is washed off by the blood current and floated downwards to where some impediment to its progress is met with and thus blocks the vessel.

In another class of cases the obstruction is brought about by traumatism, and to this I particularly wish to draw attention in a subsequent paper, for examples of this kind come directly under the notice of the surgeon, whereas those which are included in the former division only come into his hands in their later stages, when gangrene is either threatened or present.

(To be continued.)

[2] Transactions of the Clinical Society, 1878.

A CONTRIBUTION TO THE SURGERY OF THE URETER.

BY J. BLAND SUTTON, F.R.C.S. ENG.,
ASSISTANT SURGEON TO THE MIDDLESEX HOSPITAL.

THE ureter is practically a muscle traversed by a channel lined with epithelium. At its lower end the muscle-tissue of the ureter is directly continuous with that of the bladder. It has been determined by actual observation that rhythmical waves of peristaltic contraction occur in the ureter, the waves passing invariably from the kidney to the bladder. As these contractions of the ureter arise much in the same way as those in the muscular substance of the heart we may with Foster speak of them as "beats." These spontaneous movements or beats "are subordinated to the flow of urine into the pelvis; the more active the secretion of urine the more frequent and vigorous are the beats of the pelvis and the ureter." It is very fallacious to simply regard the ureter as a passive conduit; urine is conveyed along it on the same principle that fluid is conducted into the stomach by the œsophagus. The rhythm and power of the ureteric beat may be best studied in adult individuals with exstrophy of the bladder. When urine is being abundantly secreted a jet of fluid, sometimes 5 centimetres high, will issue from each ureteric orifice at intervals of a few seconds. Occasionally the jets from the two openings are synchronous, sometimes alternate, but, as a rule, independent in time and variable in force. When the flow is less abundant the jet appears with diminished regularity and with longer intervals.

Great and unusual suffering sometimes results from what may be termed exalted action of a ureter, as the following case demonstrates:—

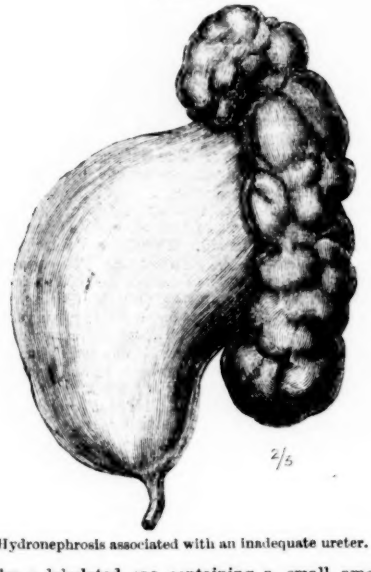
In August, 1892, I saw a married woman twenty-eight years

of age for chronic disease of the Fallopian tubes. She was sterile and had been treated for several years by rest and drugs. Her condition had become so serious that it was necessary to attempt the removal of the uterine appendages. At the operation the Fallopian tubes were found enlarged with a diameter of 2 centimetres and firmly adherent to the pelvic floor. The left tube and a part of the ovary were detached and ligatured. When the right appendages were released and drawn into the wound a coil of ileum was found adherent to the tube. The gut was gently detached; it was then discovered that the adherent ileum covered a circular perforation in a flexure of the tube. The ovary and tube were removed, the pedicle being secured with silk. Convalescence was soon complete and the patient spent the winter months in the south of England, returning to town in May, 1893. She now began to suffer from increased frequency of micturition and I began to suspect that the stump on the right side was giving trouble, and on vaginal examination a tender lump could be felt to the right of the cervix. The trouble with the bladder increased and became serious; on two occasions there was a definite rigor followed by a temperature of 102° F., so I determined to puncture the swelling through the vagina with the hope of finding pus. This was done, but no pus was found. Two days later the patient complained of a profuse watery vaginal discharge, which I soon satisfied myself was urine. Records were kept of the amount of urine discharged from the bladder and of that which escaped from the vagina, and it was found that they were equal. It was noteworthy that coincidently with the establishment of the urinary fistula the pain and discomfort at once disappeared. It was ascertained that each time the patient passed urine its amount measured with extraordinary exactitude two ounces. Fourteen days after the fistula was established it was resolved to investigate the bladder under anæsthesia in order to determine the situation of the fistula and Mr. Buckston Browne gave me the benefit of his advice. On examining the vagina a rounded aperture was detected in the fornix to the right of the cervix. Milk injected into the bladder was retained and did not escape by the fistula. At this consultation we ascertained two facts: (1) that the fistula was ureteric; and (2) that the bladder was contracted and would not hold more than two ounces of fluid. We also were hopeful that the fistula would close and decided to wait for this event. Ten days later the fistula showed signs of closing and a few days later closed for ever. Coincident with the closure of the fistula micturition became painful and urgent, the bladder discharging with great exactitude two ounces of urine, as shown by the fact that two ounces of urine were passed at 6.25 A.M., at 8.40 A.M., at 10.30 A.M., at 11.10 A.M., at 12.40 P.M., at 1.45 P.M., and at 2.50 P.M.; one ounce and a half at 3.25 P.M., and two ounces at 4.40 P.M. and at 6.20 P.M. The clinical facts enabled us to make the following deductions: 1. The right ureter was entangled in inflammatory tissue in that part of its course where it runs between the layers of the broad ligament (mesometrium). 2. This implication of the ureter near its vesical termination teased the bladder and induced tonic contraction of its muscle tissue. These deductions were explained to the patient and her husband and it was pointed out that if the symptoms did not abate we should probably deem it necessary to remove the right kidney. The trouble increased, and after a careful consideration of the case with Mr. Buckston Browne nephrectomy was decided upon and the right kidney was removed in June, 1893. The organ was quite healthy. The results of the operation were admirable. The dysury ceased immediately, the excessive vesical contraction began to yield, and the capacity of the bladder increased in a few days to four ounces. Three weeks after the removal of the kidney the wound was healed and the bladder would hold without discomfort ten ounces of urine, and a few weeks later the patient wrote that she had no trouble with the bladder, but that a sinus had formed at the lower end of the scar left after the oöphorectomy. Some months later a silk ligature escaped and the sinus closed, and she has since remained in vigorous health. She menstruates regularly and at times this is accompanied by pain. The persistence of this function is due to the fact that I was unable to remove completely the left ovary. At the present date the patient is in excellent health.

The next case illustrates the suffering which is occasioned by an inadequate ureter. In 1894 Mr. J. J. Clarke of Walthamstow placed under my care a married but sterile woman forty-four years of age on account of abdominal pain. When she first came under observation a painful swelling was easily made out in the left iliac fossa, resembling in some points an ovarian tumour. After resting in the hospital this swelling disappeared, but an ill-defined mass could be made out on each side of the uterus. The patient complained most of a dragging pain in the left loin with frequent attacks of acute pain resembling renal colic. She had suffered from pain of this kind at intervals for twenty-five years, but it had increased in severity during the last year and caused her so much suffering that she was anxious for relief. On physical examination the kidney was not perceptible on either side, although the woman was very thin. Observations were made on the urine daily, but no defects in quantity or quality were detected for many days. One morning after a night characterised by more than usual pain the urine was opalescent and on microscopic examination yielded pus. I decided to explore this kidney. It was examined through an incision in the left linea semilunaris and found to be a flaccid sac; the right kidney was normal in size and texture; the ovaries were cystic and as big as hen's eggs, but free from adhesions. The abdominal incision was closed and the left kidney removed through an incision in the loin. Next day the pain had ceased. Recovery was rapid and complete.

The kidney is interesting; the cortex (see Fig. 1) is represented by a lobulated sac containing a small amount of secreting tissue; the infundibula and the pelvis form a thin-walled bag opening suddenly at what corresponds to the ureteric strait into a very narrow ureter, indeed, the canal of this ureter is narrower than that of a fœtus at term. When fresh the dilated pelvis had a velvet-like appearance, and it seems to me probable that inspissated inflammatory exudation from time to time plugged the orifice of this inadequate ureter and led to distension of the pelvis. The transit of the obstructing plug induced exalted action of the muscle fibre of the ureter and consequent cramp or renal colic. It seems to me probable that we have to deal with an unusual example of congenital hydronephrosis; the patient was certain that she had suffered from "the pains" in her side for twenty-five years. This view receives support from the lobulated condition of the vestige of the renal cortex and the extreme thinness of the ureter.

FIG. 1.



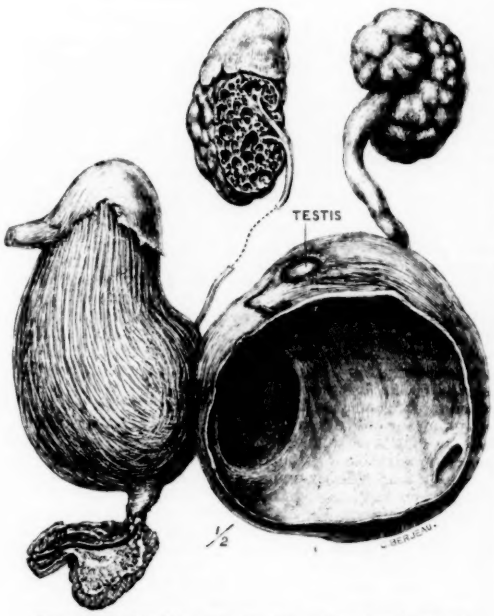
Hydronephrosis associated with an inadequate ureter.

It is an interesting and, from a diagnostic point of view, important fact that hydronephrosis is often accompanied by increased frequency of micturition. The cause of this was never clear to me until my experience recorded in the first case. Thus it would appear that when the "beat" of the ureter becomes exaggerated the muscular contraction is not confined to the ureter but involves that of the bladder, producing what we usually call vesical irritability, but when

it occurs in a voluntary muscle we speak of it as clonic contraction.

The third case forms a striking contrast to the "inadequate ureter" we have just considered. At the kind request of Dr. Chapman Grigg, Mr. Stabb was good enough to preserve for me a fœtus born at nearly full time with great enlargement of the abdomen due to some abnormal condition of the urinary organs. On dissection it was found that the fœtus had no anus and the rectum ended blindly on the back of the

FIG. 2.



Hypertrophied bladder, dilated ureter, and hydronephrotic and cystic kidneys from a fœtus with imperforate urethra.

bladder. The penis and scrotum were normal, but the urethra ended at the bulb; from that point to the bladder it was impervious. The bladder, as shown in Fig. 2, was distended and its walls greatly hypertrophied, the muscular fasciculi standing out as thick strands. Connected with the left side of the bladder is a large sacculus capable of holding 300 c.c. of fluid; the left ureter opens into this sacculus by a valvular orifice. The ureter itself is dilated throughout as well as the renal pelvis. The sacculus communicates with the vesical cavity by an orifice 3 centimetres in diameter. A careful study of the relations of the sacculus proves that it is an enormous local dilatation of the ureter and as it enlarged it carried on its crest the testis; the spermatic vessels were seen in the fresh condition of the specimen stretched across its wall. The right kidney is a congeries of cysts—an example of the condition known as congenital cystic kidney. The ureter is a thin narrow thread.

Although this specimen is devoid of what is commonly called practical interest it has, nevertheless, importance of another kind. First of all, it indicates that many specimens which have been loosely described as bifid bladders were probably of the same character as this. Some specimens described as bifid bladders are due to dilatation of the urachus (allantoic cysts), and others reported as examples of lateral bifidity of the bladder or congenital diverticulum of the bladder were in all probability, as in my specimen, enlargement of the vesical end of the ureter. It is instructive, also, to find a hydronephrotic kidney on one side and congenital cystic kidney on the other. This form of cystic kidney has long puzzled pathologists, and its association with an imperforate urethra must lead to a reconsideration of some views held in regard to its causation.

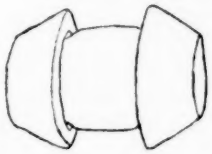
Queen Anne-street, W.

A SUGGESTION FOR INTESTINAL ANASTOMOSIS.

BY J. JACKSON CLARKE, M.B. LOND., F.R.C.S. ENG.,
ASSISTANT-SURGEON TO THE NORTH-WEST LONDON HOSPITAL,
PATHOLOGIST TO ST. MARY'S HOSPITAL.

THOUGH careful stitching would appear to be the best method of reuniting divided intestine, it is common knowledge that in many cases the condition of the patient is such that any prolonged operation is out of the question, and in such cases some of the many ingenious mechanical devices invented for the purpose have to be called in requisition. In venturing to suggest an addition to the already formidable array of such instruments I naturally feel some diffidence, but I am encouraged by the reflection that, as far as I am aware, the principle of the apparatus to which I would draw attention has not been previously employed. The most ingenious and expeditious mechanical method of instrumental anastomosis is that devised by Murphy, whose "button" has no doubt saved many lives, and some of the successful cases have been treated at the hospital at which I was trained. I have, however, been called to make necropsies in a few cases in which the issue has been fatal, and in two of them I found that the wall of the gut had sloughed where it lay over the rim of the metal diaphragm which is pressed by a spring against the double layer of bowel. In the instrument which I have devised the pressure is made by indiarubber rings the edges of which are rounded off. In Fig. 1 is shown

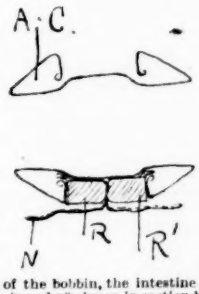
FIG. 1.



Outline sketch of the bobbin (natural size).

the size of the instrument as designed for small intestine; for large intestine an additional quarter of an inch in diameter could be obtained. Fig. 2 represents the bobbin as seen in section. The chamber AC could be used to contain some mild antiseptic. In the lower part of Fig. 2 the rubber rings are shown with the

FIG. 2.

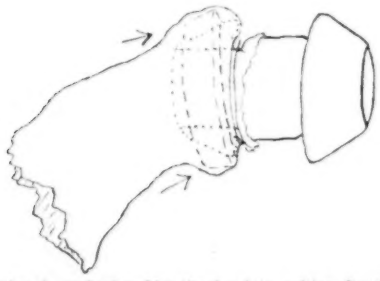


Longitudinal section of the bobbin, the intestine (N), and india-rubber rings (R and R') shown in section below.

bowel *in situ*. Both have the same diameter as the smaller part of the bobbin—i.e., half an inch. They are cut so that when stretched to the diameter of the barrel of the empty bobbin their depth just brings them flush with the lips of the larger ends of the bobbin. The mesial edges, both inner

and outer, of the rubber bands are slightly rounded off. One band (B) is half as wide as the barrel, and the other (B′) is cut obliquely, so that at its outer edge it is $\frac{1}{32}$ in. wider than half the length of the barrel. The mode of making the anastomosis is shown in Fig. 3. One of the rubber rings

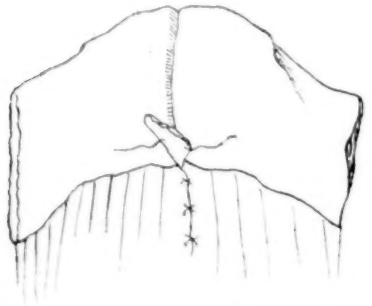
FIG. 3.



Showing the mode of pushing the ring into position after the bowel has been secured to the bobbin by a purse-string ligature. Only one ring is shown, although both are pushed on at the same time.

is lubricated with oil or soap and is inserted into one end of the gut, and then a purse-string stitch is run close to the border of the intestine and securely tied over the narrow neck of the barrel. The other end of the gut is treated in the same way, then the rings are easily pushed (by the fingers of the operator pressing through the gut) over the ends of the bobbin on to the barrel, and thus a secure anastomosis is effected. The redundant part of the mesentery may be drawn into two triangular folds, one on each side of the bowel, and fixed, as shown in Fig. 4.

FIG. 4.



The appearance of the anastomosis when completed.

I have tried the process on both thin atrophic and thick œdematous bowel in the cadaver and found it work well, the anastomosis being effected in six minutes. After the anastomosed bowel had been for some days on the instrument in weak formalin solution the part of the bowel between the rubber tubes was found to be thin and papery, whilst the rest of the bowel was thick and succulent. The slight wedge-shape of the rings would seem to secure sufficient pressure to cause sloughing. I hope soon to acquire the power to test the apparatus on some suitable quadruped. Its advantages would appear to be as follows. It does away with the sharp cutting rim of Murphy's button, it is much lighter (if made of aluminium it would be extremely light), it has a much larger lumen (and thus would cause less obstruction and allow more rest to the bowel), its ends are more tapering, the antiseptic chamber could be used to contain a weak glycerin-gelatin carbolic mixture which by osmosis would keep in check too rapid sloughing at the line of separation, and it is simpler and cheaper. The instrument has been very skilfully made for me by Messrs. Meyer and Meltzer.

Old Cavendish-street.

LEUCOCYTHÆMIA AND ITS TREATMENT.

BY RICHARD J. COWEN, L.R.C.P., L.R.C.S. IREL.

ON July 1st, 1895, a married woman aged twenty-eight years was brought to me for treatment. In appearance she was exceedingly pale, with dark areolas around the eyes; she seemed to suffer from great difficulty of breathing in walking and much lassitude. She described her ailment and its history as follows. Some two months ago she noticed that she was getting weaker, and her friends were constantly telling her how bad she was looking; her appetite was getting worse every day, and even the sight of food filled her with disgust. She noticed that she had increased difficulty in going upstairs because she "panted so much," and even walking on level ground caused her the same trouble. She lost all interest in her daily work and her spirits were very much depressed. She suffered a good deal from pains in the abdomen and she found her waist had increased in size, indeed, so much so that her neighbours congratulated her upon the probability of an accession to her family. About this time she went to see a medical man, and was treated, she believes, with arsenic and iron, but under his treatment she found herself rapidly getting worse. Occasionally she noticed large bruises appearing on her legs and arms and she could not imagine how she got them. Her family history, as far as I could ascertain it, was good, her parents and grandparents being very healthy people. She had two children. She had never suffered from any severe illness and had no extraordinary worries of any kind. The menses were regular in period but not in quantity. Her pulse was 60, flabby and weak when at rest, but the least exertion or excitement made it irregular and fluttering. The temperature in the axilla was 97·5° F. and in the mouth 97·7°. The heart sounds were feeble; the second sound was very sharp. A pulmonic systolic murmur could be distinctly heard and a loud blowing under the left clavicle. The urine was small in quantity, of specific gravity 1012, with no traces of albumin or sugar. The abdomen was very much enlarged, hard, and tense, and a little tenderness on pressure was felt in the left hypogastric space. The spleen could be felt extending quite across the abdomen, its upper border reaching under the ribs and its lower coming to within three inches of the pubic arch. The microscopic examination of the blood showed an enormous preponderance of the white corpuscles and an abnormally small quantity of the red and white taken together. Many of the red appearing in the field seemed to be undergoing degeneration, many were granulated, while others had a broken and irregular contour. The patient lived in rather close and dark rooms. She suffered from headaches and constipation a good deal, seemed to have lost all hope of recovery, and was in a very despondent condition. There could be little doubt that the woman was suffering from leucocythæmia, though the sex and history of her case were somewhat unusual. She presented in a marked degree the dulled and enfeebled intellect so common to all affections of the blood. Indeed, I have noticed in a large number of anæmic cases that depression, lassitude, slowness of thought, and disinclination to mental work are amongst the earliest symptoms noticeable, appearing long before any pallor of the mucous membranes can be detected and even before there is any recognisable change in the appearance of the blood under the microscope. In nine cases out of ten such a train of symptoms will be found to precede disorders of the blood of an anæmic character.

The small quantity of iron in the body in health and the very minute deficiency in what we call anæmia, the rapid but too often short-lived effect of the administration of the metal, would seem to suggest that we have in these cases to treat an affection of which the poverty of the blood is only a symptom and not a cause. It has been proved by Bequerel that where two fluids are separated by an animal septum they form an electrical couplet in which the surfaces of the septum form the positive and negative poles, consequently that the tissue cells act as galvanic batteries, from which, according to the nature of the surrounding fluids, a certain amount of electrical action results. It has been found that the internal and external surfaces of the capillaries act very markedly in this manner, while the peculiar distribution of the axis cylinders of the nerve fibres around the capillary walls would suggest the idea that at

least one of their functions was to conduct away the current. For many years it was believed that the oxygen-carrying function of the blood was solely for the purpose of providing oxygen to combine with the carbon of the tissues, and so, by enabling a true combustion to be maintained, provide for the production of the necessary bodily heat; but the discovery that the amount of oxygen absorbed by a working muscle was not nearly accounted for by the amount excreted of CO_2, and that the power of such muscle was much greater in an atmosphere of oxygen than in any other, struck a very heavy blow at this theory, and no very satisfactory one has been since advanced. It is just conceivable that one of the most important functions of the blood is to act as a *depolarising* fluid, to furnish a constant available supply of loosely combined oxygen to absorb the hydrogen resulting from the electrical action which would first interfere with and ultimately stop all current. Looking at it from this point of view a more perfect arrangement could not be devised; a circle of fluid containing a substance—hæmoglobin—capable of rapidly and very loosely combining with oxygen afforded at one part of its journey every facility for absorbing oxygen from the atmosphere and throughout brought most intimately into contact with the tissue cells. Were it possible to construct a galvanic cell on this principle perfection would be attained. Presuming, then, that this is one of the functions of the blood it can be easily imagined how grave and far-reaching would be the effect of any impairment of this polarising property; there can be no doubt that a train of symptoms identical with those observed in the anæmic states would be brought about, the most marked naturally being those indicating impairment of nervous energy. From a long course of experiments I have made, I have come to the conclusion that the blood of anæmic patients, that is, those suffering from idiopathic anæmia and more especially leucocythæmia, differs from healthy blood in the fact that the hæmoglobin is in a different chemical state. It does not combine as readily with oxygen or with the same *quantity* as that in normal blood. Whether this is due to the formation of a lower oxide or whether a part of the hæmoglobin does not enter into combination at all is a matter for further experiment. It occurred to me, however, that if oxygen in its allotropic form as ozone was brought into contact with the corpuscles, its very powerful oxidising properties would do much to render the oxidation of the hæmoglobin more complete, thus giving the system time and energy to resume the proper formation of the red corpuscles and their contents, as for many reasons it is extremely probable that the excessive formation of the white corpuscles in these diseases is due to the failure of the red to fulfil their most important function. It is not, perhaps, quite correct to speak of the formation of the white corpuscles as being excessive, for the reason of their presence in such large numbers as compared to the red is more possibly because of their excessive *survival* than formation. In most cases of anæmia where an opportunity occurred for making a post-mortem examination the liver was found to contain large quantities of iron and débris of red corpuscles. Now as the liver acts as a kind of sentinel for the blood, working to destroy and expel unauthorised constituents, the probable reasons for the presence of such in this organ is that the composition of these corpuscles was so abnormal that the liver was unable to recognise them as fit to fulfil their duties and consequently destroyed them with a view to completely expelling them from the organism. As the formation or preservation of the white corpuscles is not interfered with this would abundantly account for the enormous preponderance of these. In this we have also the reason that the administration of iron has in ordinary anæmic cases such a good but short-lived effect, while in many cases the absolutely injurious effect of iron may be accounted for by the extra burden thrown on the liver.

With the object of carrying out treatment on these lines I commenced to administer ozonised air as an inhalant for fifteen minutes daily to the patient. I used a modification of Andreoli's apparatus for the purpose; in this a stream of air is driven over an arrangement of vacuum tubes surrounded by serrated and flattened wire and connected up to the electrodes of a powerful induction coil worked by eight quart bichromate batteries. At least 75 per cent. of the oxygen in the air is ozonised by the enormous number and rapidity of the discharges taking place from the large number of points surrounding the tubes. The air, after being ozonised, passes into a mask covering the mouth and nose of the patient and was inhaled. The patient had considerable difficulty in breathing, at first owing to the large amount of ozone contained, but the oppression and giddiness disappeared after the first two or three sittings completely. After seven days she volunteered the statement that "her appetite had greatly improved" and that she looked forward to "taking the gas," as she could eat such a good meal when she got home. Microscopic examination of her blood at this stage showed a diminished number of white corpuscles and a total absence of the degenerated red ones seen before. Her spirits were much better, she had lost her headache, and the pain in her abdomen was markedly better. I now increased the time of inhalation to twenty minutes daily. After a fortnight's treatment the red corpuscles had risen from 40 to 60 per cent., the white had greatly diminished in number, and the circumference of her waist three inches above the umbilicus had decreased one and a half inches. She was able to walk better and could take her food with relish. Her bowels now acted regularly. From this time she progressed rapidly, and at the end of a month she had a healthy colour both on the skin and the mucous membranes; she could run upstairs quickly without the previous distressing difficulty in breathing. The deep yellow colour of her skin, which was one of the most marked symptoms of the earlier stages of her disease, was now entirely gone; in fact, to all appearances the woman was in good health. Examination of the blood showed normal conditions, no excess of the white, no signs of degeneration in the red, the characteristic rouleau forming as usual. Her spleen had diminished to about one-half its previous size and she was able to wear the same clothes which fitted her before her illness. She now came for the inhalations every third day only, and three months from the time of commencing treatment I discontinued them, considering her to be quite cured. At the present time she presents a thoroughly healthy appearance, and with the exception of a somewhat large spleen shows no symptoms of ill-health. During the treatment she took no medicine of any kind except an occasional seidlitz powder and made no change in either food or habits. The very remarkable success of the ozone treatment in this case led me to try it in other diseases in which an abnormality in the quantity or quality of the blood was a prominent symptom, and I have had some very remarkable and encouraging results.

THE SCOPE AND VALUE OF ELECTRICITY IN MEDICINE.[1]

BY W. S. HEDLEY, M.D. EDIN.,

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[HAVING shown shadowgraphs[2] and explained in connexion therewith something of the nature of electrical discharges in vacuum tubes Dr. Hedley remarked that without much knowledge of photography and without any knowledge of electricity it is not difficult to imitate Professor Roentgen's results, and that already the enterprising photographer had begun to work the process commercially. It was, in fact, fast passing out of the experimental stage, and apart from other and perhaps more important bearings the "new radiation" could never lose its interest for the medical man, even on the one ground alone that it had already afforded many a useful glimpse into the interior darkness of that complex mechanism with which it is his province to deal. The subject of the address was then proceeded with.]

The electrical history of the last ten years is, as all the world knows, a history of growing knowledge and of great achievement. Medicine, profiting by the one and by the other, has begun to aim at some exactness in its electrical procedure and to demand that any sound system of electro-therapeutics be based on the principles of electrical as well

[1] Abstract of a paper read before the Medical Society of the London Hospital on March 12th.

[2] One of these showed the hand of a patient of the hospital who had broken a brad-awl in an attempt to force it into its handle. It injured the hand, but the man felt sure that none of the pieces had entered. The whole hand was much swollen, but there was no direct evidence of any foreign body. The shadowgraph, however, clearly showed two (metallic?) bodies lying across the metacarpo-phalangeal articulation of the middle finger.

as of medical knowledge. During the same period the history of medical electricity itself has not been uneventful. It is notable for the appearance of more than one memorable book. Amongst these the works of Erb and of de Watteville stand out as the first systematic and successful attempts to bring electro-therapeutics into line with exact science. The introduction of the milliampèremeter, the voltmeter, the rheostat, and other instruments of precision marked this new departure. Another era not long entered on is now in progress. It is characterised by an increased attention to electrical physics as the only sure foundation for electro-therapeutics. There are also other signs of the times. A more formal recognition by the chief metropolitan hospitals, the existence of such societies as the American Electro-Therapeutic Association and of the Société Française d'Electrothérapie, the development of a special literature, and an increasing study amongst medical men of the physics of electricity are all evidence that electro-therapeutics is beginning to organise and to assert itself. The medical man, taking advantage of recent progress in other branches of applied electricity and of the public supply currents that pass his door (and this I hope will also shortly be true of the London Hospital), finds himself in possession, not only of an improved instrumentation and a fast increasing knowledge of electrical phenomena, but has at command undreamed-of sources of electrical supply of unlimited usefulness and of novel power. From the lead of a 16-candle lamp he helps himself to an ever-ready supply of electrical energy, either of a continuous or of an alternating kind. The former furnishes a current which will do for him all that the uniform flow of the galvanic cell can accomplish. Passing the same current through a coil he obtains that dissymmetrical alternating current universally familiar as the current of the medical induction apparatus. Still availing himself of the same supply, he heats his cautery, lights an exploring lamp or charges his accumulators, or passing the current through a motor he drives his static machine or actuates his therapeutic alternator. The latter can in its turn be arranged to supply a current having all the smoothness and other qualities of that known as sinusoidal, with its rapidity, its electro-motive force, and even the shape of its electro-motive force curve under absolute control. If the current that comes to his door in the street mains be an alternating one he passes it through a transformer to apply it to the body to electrise his water bath or to heat his cautery. He is thus supplied with an alternating current of a symmetrical, although not of a strictly sinusoidal, character, whose therapeutic usefulness is fully proved. In that form of oscillating current known as the "static-induced" he finds another modern current and the most efficient method of inducing powerful and painless muscular contraction. Still more recently he begins to turn his attention to those currents of great frequency and high potential whose phenomena are a revelation to the scientific mind and whose effects open out new fields of physiological research and point to endless therapeutic possibilities.

Realising the rapidity of progress he recalls the coarse instrumentation and crude procedure of a comparatively recent past, when an unmeasured current was "dabbed" on to the body at the end of a couple of sponges, and it was orthodox practice to administer faradaic torture by means of a couple of metal cylinders grasped by the patient. In those days—and they are not long ago—the one end and aim of electrisation was to induce muscular contraction. This idea still survives in the popular mind, in the electricity of the "trained nurse" and of the "medical electrician." Nor is it quite confined to these. There is still the echo of a voice from high places proclaiming the doctrine that the only object of electrising a paralysed muscle is to keep that muscle exercised pending the return of voluntary power. Such a proposition conveys, in my opinion, no adequate idea of the properties and uses of an electric current. Modern practice covers a far wider field than this. Besides a purely localised action, nutritive, sedative, or stimulant, it is sought by methods of general electrisation not only to influence for good the functional activity of organs, but to exercise a demonstrable, perhaps even a measurable, influence on the whole process of nutrition. It is true that the physician still finds himself without any one great guiding principle of universal application whereon to base his electrical procedure. He has, so to speak, no compass to steer by. But, on the other hand, endless facts have been elicited of present usefulness and future promise. These facts, multiplied, collected, and arranged, must ultimately disclose some wide generalisation; in the meantime they are sufficient to guide him in his practice. If he has no compass to steer by he has at least *landmarks* to keep him in a safe course. Such landmarks are to be looked for in the physical character of electric currents, in their action on living structures as demonstrated by physiological experiment, and in a knowledge of their therapeutic action as derived from experience. A familiarity with one and all of these landmarks is of the first necessity, and the study of electricity in diagnosis and in treatment resolves itself into a study of these guiding landmarks. It is to a consideration of these that we must address ourselves and it is to a bird's-eye view of the first line of these landmarks—viz., the physical character of currents—that I should like chiefly to draw attention. Nothing is more false than to regard electricity as a simple agent, always the same in kind, acting in the same way, applied by the same method, and having identical results. In point of fact, its effect depends upon the kind of electricity used—i.e., the modality in which electricity is employed; in other words, on the physical character of the current. A continuous current has a very different action on the living organism from an alternating one, and alternating ones are radically different in their effects according to the form and period of the electro-motive force curve. Nor is it right to regard the action of electric currents on the living organism as immediately due to electric energy considered as something by itself—an imponderable and immaterial physiological agent. Electricity in all its varied modalities acts through the electrolytic or other material molecular changes which it brings about.

[The physical characters of the "three conventional currents ordinarily used in medicine"—the galvanic, the faradaic, and so-called static—were then briefly considered, but reserved for closer study. It was pointed out that these currents are beginning to be supplemented and to some extent supplanted by electricity in certain new modalities. The lecturer having explained the continuous and alternating dynamo currents, and demonstrated the power of the "static induced" current to bring about powerful and painless muscular contractions, "currents of great frequency and high potential" were considered at a greater length.]

Their alternations are to be counted by hundreds of thousands a second. For medical use they are generally obtained by means of the oscillating Leyden jar discharge traversing a solenoid. Such currents may carry energy enough to light a five-candle power lamp, and if the human body with its thousands of ohms resistance be at the same time placed in circuit there is scarcely a perceptible diminution in the brightness of the glow, and notwithstanding the tremendous amount of energy passing there is scarcely a consciousness of its passage.

[A five-candle power lamp was then incandesced by the current in question. The circuit was then broken and completed through the body, the latter being the only route open to the current; the lamp again glowed with scarcely any sensory or other effect on the part of the person through whose body the current passed. The importance of the fact that the body can stand so large an amount of energy in this form would presently appear.]

The physiological effects of such currents are according to d'Arsonval as follow: (1) an analgesia at the point of entry and exit of the current; (2) a fall of arterial tension; (3) increased action of the skin; (4) increase in the "respiratory combustions"; and (5) the virulence of blue pus is attenuated and after about half an hour's application the bacillus dies. More recently the same experimenter has addressed himself to "the soluble products of the microbes"—the toxines. Taking a U-shaped tube having a partition at its lowest part to prevent admixture of liquids he filled each branch with an active diphtheritic toxine and in each placed an electrode, one connected with the positive and one with the negative pole of this current. Now as the current which traverses the toxine is oscillating at the rate of at least 200,000 alternations a second it is possible to form some idea of the molecular shaking to which the culture is subjected. Having thus electrised an active diphtheritic toxine for fifteen minutes d'Arsonval and Charrin had injected 2·5 c.c. into three guinea-pigs and the same amount non-electrised into three other guinea-pigs. There was no doubt about the result. The "control" animals died within a few hours of each other in about twenty-four hours; the others were alive and well. The importance of the fact that the body can bear such high amounts of energy in this form is from a clinical point of view at once apparent. These currents being without action

on the sensory and motor apparatus of our bodies, may it not be possible to use such currents strong enough to attenuate the toxine in the living body?

ANALYSIS OF TWO HUNDRED CASES OF SCIATICA.

BY SAMUEL HYDE, M.D. ST. AND.

A LARGE proportion of the cases that present themselves for treatment at thermal stations consists of painful nerve affections, and a great many of these are made up of lesions of the sciatic nerves and their branches. In consulting the literature of sciatica I have been forcibly struck with the paucity of clinical information which has been recorded upon the subject. It was this consideration which led me a short time ago to tabulate a number of cases of sciatica which have come under my personal observation at Buxton and for this purpose I selected 200 cases occurring in recent years. My analysis revealed to me some striking facts, which were not only at variance with my own preconceived notions, but with those of many other observers. A brief record of my investigation may be of interest to some of my professional brethren, and I therefore submit the following figures and remarks.

The 200 cases consisted of: Males, 112, or 56 per cent.; females, 88, or 44 per cent.; right side affected, 72, or 36 per cent.; left side affected, 62, or 31 per cent.; both sides affected, 66, or 33 per cent.; inflammatory, 109, or 54·5 per cent.; and non-inflammatory, 91, or 45·5 per cent. In 157 cases the patients were suffering from a first attack, in 22 from a second, in 13 from a third, in 1 from a fourth, in 3 from a sixth, in 1 from an eleventh, in 2 from a twelfth, and in 1 from a fourteenth. The attack had lasted under one month in 45 cases, from one to three months in 70, from three to six months in 29, from six to twelve months in 29, from one to two years in 15, three years in 6, four years in 1, five years in 2, and six, seven, and ten years respectively in each of 3 other cases. The ages were: Under fourteen years, 0; between fourteen and twenty, 1; between twenty-one and thirty, 26; between thirty-one and forty, 36; between forty-one and fifty, 47; between fifty-one and sixty, 53; between sixty and seventy, 34; and between seventy and eighty years of age, 3 cases. As exciting or predisposing causes the following were ascertained as probable: Gout, 48, or 24 per cent.; debility, 43, or 21·5 per cent.; rheumatism, 35, or 17·5 per cent.; chill or exposure, 26, or 13 per cent.; influenza, 12, or 6 per cent.; alcohol, 9, or 4·5 per cent.; constipation, 8, or 4 per cent.; anæmia, 7, or 3·5 per cent.; malarial, 7, or 3·5 per cent.; and injury, 5, or 2·5 per cent. The duration of the treatment at Buxton lasted from three days to twelve weeks, or an average of two and a half weeks. The results of treatment were as follows: Cured, 90 cases, or 45 per cent.; improved, 101 cases, or 50·5 per cent.; and no better, 9 cases, or 4·5 per cent.

Remarks.—In his excellent little treatise on Sciatica Dr. Symons Eccles states that of the sixty-five cases observed by him forty-one occurred in females. I confess to some surprise when I read this statement, which is opposed to such authorities as Dr. Gowers, the late Professor James Ross, and others, who hold that the disease is more frequent in males than females. An examination of these 200 cases confirms the opinion of these authorities, 56 per cent. consisting of males, as compared with 44 per cent. of females. An interesting point revealed, perhaps for the first time, by the above figures is that unilateral attacks, bilateral attacks, and double attacks occur in almost equal proportions. This is the more interesting, I think, when considered in its relation to the more common causes of the affection, as I shall note later. Furthermore, of these 200 cases those showing inflammatory signs were 9 per cent. in excess of those which appeared to be of a purely neuralgic form. It would seem that the liability to recurrent attacks is not great. Only 22 of the cases were suffering from a second attack, 13 from a third, 3 from a sixth, 2 from a twelfth, and 1 from a fourteenth. As to the duration of the attacks, the largest number, 70, had lasted from one to three months, but 27 had been suffering over a year and 1 as long as ten years. None of these cases were under fourteen years of age and only one between the ages of fourteen and twenty. The majority, 137, occurred after forty years of age and most of these—viz., 26 per cent.—were between the ages of fifty and sixty. My experience thus differs from the late Professor James Ross, who found the largest number between forty and fifty years of age.

The most common cause of sciatica has been hitherto generally ascribed to exposure to cold, but it is remarkable that in only a small proportion—13 per cent.—of these cases could I obtain any distinct trace of such an exciting cause. In the majority—comprising 87 per cent.—there was no such history, and the large proportion of 63 per cent. were traceable to some constitutional condition, such as gout, rheumatism, and general debility. Nor does my experience support the theory that constipation is a very fruitful cause of sciatica, only 4 per cent. of these cases being fairly attributable to that as an exciting cause. I am, of course, quite prepared to admit that these figures would be subject to considerable modification in some respects were a like number of cases selected from hospital practice, but I think they may be taken to represent fairly the cases met with in ordinary private practice. I also think that the foregoing facts afford sufficient ground for questioning the assumption, which has until now been accepted by most of those who have written upon the subject, that sciatica is in the majority of instances due to some local cause, such as exposure to cold or to pressure from constipation. Apart from the fact that of my 200 cases in no less than 63 per cent. there was no history of chill or constipation, but distinct signs of gout, rheumatism, or debility, I think the fact that the right, left, and both sides were pretty equally affected is additional evidence in favour of some general, rather than local, condition operating as the most common cause of sciatica. For example, if constipation were such a common cause as hitherto believed, then one would expect to find left sciatica much more frequent than right, on account of the position of the rectum, but this is not the case. Likewise, if exposure to chill were the frequent cause that it has been held to be, then one would expect to see more cases in which the pain or numbness would be confined to the limited area of exposure and not so many cases as one actually does see of diffused and distant symptoms. I have not space in this article to dwell upon the details of the treatment which I used in these 200 cases. Suffice it to say that the main factors in the treatment were change of air, the Buxton thermal waters, internally and externally, including warm douches, dry and wet massage, generous diet, gentle open-air exercise, and drug-tonics. The results of this treatment of sciatica have in my experience been amongst the most gratifying in this particular branch of practice. As already stated, out of the 200 cases selected indiscriminately, 90, or 45 per cent., were cured before they left Buxton; 101, or 50·5 per cent., were improved; and only 9, or 4·5 per cent., left the Spa no better. A large proportion of those who were only improved when they left were reported afterwards to have gradually but completely recovered. The duration of the treatment varied from three days to twelve weeks. These are results which it will, I think, be admitted are very remarkable, and should encourage physicians to make use of the remedial influences presented by the dry, bracing mountain climate and the baths and waters of Buxton and similar spas when other remedies fail to give relief in this painful disease.

Buxton, Derbyshire.

DISPLACEMENT OF THE LIVER.

BY J. SNOWMAN, M.R.C.S. ENG., L.R.C.P. LOND.

OF late increasing attention has been drawn to the various pathological features which collectively constitute the condition now generally recognised as enteroptosis. Till quite recently the only organ known to exhibit this phenomenon was the kidney, the floating or movable kidney having for some time acquired a permanent position in surgical nosology. It has now been ascertained that the conditions which produce this unstable state of the kidney are not confined to that organ, but that they act with similar effects on the liver; indeed, it appears from a recent article by Mr. Treves[1]

[1] Brit. Med. Jour., Jan. 4th, 1896.

that the stomach, spleen, and transverse colon may be displaced in a similar manner. His paper on the subject contains the first clear account of movable liver published in the United Kingdom. A reference to the condition occurs in the new edition of "Quain's Dictionary of Medicine," where it is stated that "notwithstanding the absence of any post-mortem examination a liver, normal in form and volume, may under certain conditions of very rare occurrence be capable of considerable displacement within the abdominal cavity" (W. Johnson Smith). The condition is probably not so rare as this remark suggests. In the June number of the *Canadian Practitioner* for 1895 there is given a list of eighty cases collected from various sources. In 1878 twenty cases were collected by Wickham Legg, who threw doubt on the accuracy of the diagnosis. In 1885 a monograph appeared by Landau of Berlin on Movable Liver and Pendulous Abdomen in Women. In the recently published work by Osler on Abdominal Tumours a very succinct account of a case is given. The latest investigations on the subject have been made by Faure, who has supplemented his researches by experiments on the cadaver. No doubt when the fact of the existence of this condition becomes more widely known and the proper method of examination is adopted numerous examples will be forthcoming.

A very typical case has come under my notice in the person of a married woman aged sixty-four years whom I first saw on Dec. 16th, 1894. She had been ill for a week with loss of appetite when jaundice set in, with constipation, clayey stools, and bilious urine. The prominent feature on examination was that hepatic dulness extended to just below the level of the umbilicus; the organ easily admitted of palpation through the thin abdominal walls, and its lower edge was extremely well defined. The heart and lungs were normal. This great hepatic enlargement seemed to negative the diagnosis of catarrhal jaundice, and it apparently belonged to that group of cases described by Bristowe as "hypertrophic cirrhosis of the liver." Other causes of hepatic enlargement, as cancer, syphilis, abscess, &c., were easily excluded. Against the diagnosis of hypertrophic cirrhosis were the facts of the somewhat sudden onset and the absence of an alcoholic history. The progress of the case proved that it was ordinary catarrh of the bile-ducts, and though at first refractory to treatment by the middle of January, 1895, the patient was in perfect health. More detailed examination of the liver during the illness revealed the following facts. The liver dulness did not begin till the costal margin (this was originally thought to be due to pulmonary emphysema). The whole mass of the liver could be easily moved through the lax abdominal walls, and when the patient arose to the erect posture the whole organ actually dropped two or three inches and could be felt in the inguinal region. The upper edge could not, however, be felt beneath the ribs. This condition of the liver remained *in statu quo* after the patient's recovery, showing that she had suffered from an attack of catarrhal jaundice in a movable liver. The patient had evidently long been the subject of this condition without it affecting her general health in any particular, and it undoubtedly would never have been detected had not the jaundice directed special attention to her liver. Repeated examination failed to reveal any ptosis in the spleen or kidneys, and the patient being a thin, spare woman with lax abdominal walls examination presented no difficulty.

The comparatively few cases on record render it difficult to generalise on the subject. Many of the cases have been associated with obvious disease sufficient to account for the displacement of the liver, such as spinal curvature, tumours within the thorax, and adhesions contracted as a result of inflammatory disease within the abdomen. These cases should be excluded from the category of movable livers, which depend for their production mainly on a relaxation of the suspensory ligament. Anatomically the liver should be more easily susceptible of displacement than the kidney; the latter is fixed in position by a mass of fatty tissue, while the former is merely slung up against the roof of the abdominal cavity. A displacement of the kidney almost necessarily involves tension on vessels and nerves which may be absent in a similar condition of the liver, and this would account for the existence of symptoms in the case of movable kidney and their comparative absence in that of movable liver. We are, however, confronted occasionally with symptoms of vomiting and epigastric pain in cases of movable liver. These symptoms may be of sudden onset, while a sensation of weight and dragging often forms a constant complaint. The relaxation of the suspensory ligaments of the liver must be referred to that undefined idiosyncrasy of tissue recognised in fibrous structures which consists of a loss of tone, stretching, and elongation. We know nothing scientifically about this peculiar "habit" of tissue, except that it generally exists in thin, spare subjects, mostly women who have borne numerous children. The custom of tight-lacing, as it displaces the liver, may be a factor in rendering it movable. Prolapsus uteri has frequently been noted in association with movable liver. It only remains to add that where this condition gives rise to no symptoms no interference is called for. When it has caused discomfort in the abdomen complete rest in bed has been followed by satisfactory results. Abdominal supports have been invented for some cases where this condition has produced great distress, and in a few severe cases associated with intense neurasthenic symptoms the liver has been stitched to the abdominal parietes.

Brick-lane, Spitalfields, N.E.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

SWELLING OF THE PAROTID GLAND.

BY W. T. COCKING, M.D. LOND.,
PHYSICIAN TO THE SHEFFIELD GENERAL INFIRMARY.

THE following brief notes may be of interest in connexion with Mr. Raymond Johnson's very instructive paper on Some Unusual Cases of Swelling of the Parotid Gland.[1]

In 1894 a man aged forty years, who was under treatment for dyspepsia and constipation and certain functional nervous symptoms, complained that for the last two or three years he had been much troubled with a swelling in the region of the right parotid which came on suddenly whilst eating and lasted for an hour or two. The swelling was somewhat painful and interfered considerably with mastication. He had found that pressure with the hand caused a profuse discharge of fluid into the mouth, after which the swelling gradually lessened and disappeared. The fluid had occasionally a nauseous flavour. The left gland was also affected, but much less frequently than the right. On one occasion only was an opportunity afforded of a personal examination of the swelling, which, however, had then to a great extent subsided. At that time some fulness and slight redness of the skin were detected below the right ear, and on firm pressure a copious jet of clear watery fluid was observed to escape from Stensen's duct. Nothing abnormal was at any time discovered in the mouth. Change of air and improvement in the general health resulted in the complete disappearance of the affection for some months. At the present time the attacks are considerably less frequent and give rise to much less discomfort than formerly.

Sheffield.

ON THE INEFFICACY AGAINST EARLY SYPHILIS OF IODIDE OF POTASSIUM WHEN ADMINISTERED ALONE.

BY WALTER G. SPENCER, F.R.C.S. ENG.,
SURGEON TO THE OUT-PATIENTS AND THROAT DEPARTMENT OF WESTMINSTER HOSPITAL, ETC.

SOON after the introduction of iodide of potassium and as a reaction from the excessive use of mercury it was frequently given alone, but it must be now very rare to find both medical man and patient trusting entirely to this drug. Lest anyone should be tempted to try the experiment I may record the following results, since the account given of himself by the man appears to me to be trustworthy.

The patient, a man aged thirty-one, acquired a hard sore some three years ago, which was followed by enlargement of the inguinal glands, slight pains in the limbs, and five months after the primary sore by an ulcer on the tongue. He

[1] THE LANCET, April 18th, 1896.

was ordered by a medical practitioner to take ten grains of iodide of potassium three times a day, and he continued to do so for two years after the ulcer had healed. He took the medicine regularly, he never took anything else, and he never exposed himself to fresh infection. Since the ulcer healed he has not felt anything wrong with himself. Three months after leaving off the iodide, believing from what the medical man said that he was cured, he married. After three months his wife aborted. On her recovery the husband brought his wife to me. She had a characteristically dusky, scaly rash on the arm and legs, with nocturnal pains in the bones. Both husband and wife were treated with mercury, and the wife took it regularly throughout the second pregnancy, which soon began. She has now a baby one month old, whom I have seen and who appears to be perfectly healthy.

Brook-street, Grosvenor-square.

"RUPTURE OF THE TERMINAL EXPANSION OF THE EXTENSOR COMMUNIS DIGITORUM."

BY T. N. THOMAS, L.R.C.P. LOND., M.R.C.S. ENG.

THE clinical notes which have lately appeared in THE LANCET under the above heading[1] induce me to report the following case which is now under my observation. It differs from the others in the fact that the dislocation was compound, and the way in which it was produced is certainly peculiar and worthy of record.

A man aged twenty-five years was indulging in a game of Rugby football on Feb. 15th last, and while playing as forward was following up a long kick when one of the opposing three-quarter backs took the ball and was attempting to run round him on his left-hand side when the forward made a grab at his opponent's jersey—a thick worsted one—with his left hand, but only succeeded in engaging the end of his middle finger in the collar, and as soon as his weight told on the finger it seemed to slip and when he looked at it a moment later it was bent at a right angle and the head of the bone was protruding through the skin at the back of the last joint. He straightened the finger and left the field. When I saw him an hour later I found the skin over the back of the last joint of the left middle finger and the posterior ligament, or, rather, what represents the ligament in that situation—namely, the terminal expansion of the extensor communis digitorum tendon—completely torn across, and when he flexed the joint the head of the second phalanx protruded through the wound. After washing thoroughly and dressing antiseptically the finger was placed on a straight splint, upon which it was kept for five weeks. At the end of that time the wound was quite healed under a scab, which came off a week later. Upon removing the splint the patient was unable to straighten the terminal phalanx voluntarily beyond an angle of about 135°, and though in the joint itself the movements of flexion and extension are quite free he has not yet—ten weeks after the accident—regained the power of extending it beyond that angle. The patient, whose work consists for the most part in corresponding, was not incapacitated by the accident from following his occupation for a single day. I am much encouraged by the report of Dr. Kidd's case, in which complete recovery took place after an interval of eight months, and have given my patient instructions to persevere, and I believe he very patiently and intelligently carries out my wishes.

Leicester.

"CEREBRAL MENINGITIS FOLLOWING INFLUENZA."

BY WILFRED R. KINGDON, M.B. DURH.,
LATE RESIDENT MEDICAL OFFICER AT THE STOKE NEWINGTON DISPENSARY, LONDON.

I RECENTLY attended a case which presents some likeness to one recorded in the pages of THE LANCET[2] some time ago.

I first saw the patient, a boy fourteen and a half years of age, on a Sunday, when he presented the following symptoms: severe frontal headache, excessive lacrymation together with pain on pressing over the eyeballs, aching pains in the lumbar region and legs, furred tongue, anorexia, somewhat scanty and high-coloured urine, constipation, a temperature of 104·2° F., and a pulse of 117. From what the boy's mother told me I came to the conclusion that the illness had commenced with a rigor and some sickness, but apparently no actual vomiting. There seemed to be no doubt whatever but that the boy was suffering from influenza, and I ordered him seven grains of phenacetin powder to be taken at once and a mixture containing quiniæ sulphas and liquor ammoniæ acetatis. The next day I found the patient in a much more comfortable condition; the temperature was 100·8° and the pulse 100. The pains were better, the tongue was slightly less furred, and he could be induced to take a little milk pudding. This improved condition continued for a week, but his temperature never fell below 100°. At the end of this period he began to lack interest in things which were going on about him; he had a dull, almost stupid expression; he did not seem to understand what was said to him, and at times he talked incoherently and picked at the bedclothes. The ophthalmoscope revealed optic neuritis; there was intolerance of light, the head was slightly retracted, and the *tache cérébrale* could be demonstrated, but the abdomen was not boat-shaped. The preponderance of evidence certainly pointed to cerebral meningitis. This condition of affairs had been going on for just three days when I was called in great haste to see the boy, "as he was in a fit." On arrival I found the patient seized with tonic contractions of nearly every muscle of the body; there was opisthotonos, and both sides of the body seemed about equally affected. He soon relapsed into a comatose condition and died in about ten and a half hours after the onset of the spasmodic contractions, notwithstanding the fact that he had constant care, frequent liquid nourishment, and stimulants, to say nothing of numerous drugs. Potassii bromidum, quiniæ sulphas, liquor ammoniæ acetatis, phenacetin, sodium salicylate, and other things were alike of no avail. No necropsy could be obtained, but there seemed to be no doubt that it had been a case of cerebral meningitis.

Now, how was this meningitis caused? A careful examination revealed no condition likely to give rise to the disease, and the question seems to be: Is meningitis to be put down as one of the sequelæ of influenza? I cannot give any reason why the one disease should lay the foundation of the other, neither is it my wish to advance any theory. It may be that this was but a coincidence and that lowered vitality was the predisposing cause alike of both; however, I have given only the simple facts, and it is thus open to each and every reader to take his own view of the case.

Queen's-crescent, N.W.

[1] THE LANCET, Feb. 29th and March 28th, 1896.
[2] THE LANCET, Feb. 22nd, 1896.

THE PORTSMOUTH WATERWORKS.—The proposal of the Portmouth Corporation to purchase the enormous undertaking of the water company was advanced a distinct step at a special meeting on April 28th. A special committee had had several interviews with the directors of the company, and the present scheme stands as follows: It is estimated that a total amount of consolidated stock will be required to the extent of £1,040,000. The shareholders will receive £915,000 in stock as representing the full dividend of £27,448; £104,500 will be absorbed in the payment of loan capital; £3550, seven years annuity for the secretary; £5880 for seven years directors' fees; and £4113 for unpaid back dividends. The estimated legal costs of the necessary Bill in Parliament are £6000, or a total, as above stated of nearly £1,040,000. Two and a half years ago, when the purchase negotiations fell through, the nett increase of the company's revenue was put at £600 a year; now it is over £1000, and so the directors ask more money for their concern. The gross revenue of the company is £53,000 a year and grows, of course, with the town, whose rateable value last year increased by £12,000. It is calculated that with ninety years' redemption of the stock the corporation would gain by the transaction in the form of a small actual yearly profit; at eighty or eighty-five years' redemption there might probably be a small deficit to recoup from the rates. There was some hesitation apparent in the speeches at the council meeting, but as the committee's report was carried by thirty-one votes to two it seems likely that the corporation, remembering the mistake of two years ago, will not allow it to recur for the sake even of a thousand or two paid on what they may consider heavy claims.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

THREE CASES OF FOREIGN BODIES IN THE ALIMENTARY CANAL; REMARKS.

(Under the care of Mr. C. MANSELL MOULLIN.)

THESE cases form an interesting contribution to our clinical records of foreign bodies in the alimentary canal. Case 1 is noteworthy from the fact that such a sharp-pointed body as a broken bonnet pin had passed safely so far along the intestine as to reach the neighbourhood of the ileo-cæcal valve. Its removal in the way described after abdominal section was clearly the safest procedure for the patient, for the dangers of perforation of bowel by the sharp end of the pin beyond the point reached were considerable. Case 2 is important inasmuch as it draws attention to the difficulty sometimes experienced in detecting the presence of a flattened object in the œsophagus, a difficulty which we have also seen in hospital practice in a similar case—the impaction of a tooth-plate. It also shows the great danger which the prolonged retention of a foreign body in the œsophagus gives rise to from the liability of the ulceration caused by its presence to extend through the wall and cause injury to the important structures adjacent, whether artery, bronchus, nerve trunks, or pericardium. Case 3 is an example of a method of treatment very useful in cases of round, smooth bodies of a size not very disproportionate to that of the œsophagus.

CASE 1.—A well-grown girl nineteen years of age was admitted to hospital on Dec. 14th, 1895, with the statement that she had swallowed the greater portion of a hat-pin. According to the account that she gave of herself she had felt something tickling at the back of her palate and had taken one of her hat-pins and had passed it into her mouth head first to rub it against the mucous membrane. The shaft of the pin broke and the head end of it dropped into her throat and was immediately swallowed. She brought the broken end, and by comparison with another the portion she had swallowed was nearly four and a half inches in length with a bead on the end about the size of a small Barcelona nut. She went at once to a druggist who gave her an emetic, making her violently sick, but fortunately without doing her any harm. The patient complained of great tenderness and of a sharp stabbing pain in two places, one in the front of the chest an inch and a half from the middle line and a short distance above the nipple, the other behind a little to the left of the third dorsal vertebra. As it was thought that during the vomiting caused by the emetic there was a possibility of the pin, which went down head first, being driven upwards into the wall of the œsophagus, a probang with a metal end was passed down into the stomach, but nothing was felt. The patient was very hysterical, so much so that her sister, who came to see her, refused to believe that she had swallowed anything at all; but as the account that she gave of herself did not vary, and the pain and tenderness continued and were made worse by attempts at swallowing, an exploratory operation was advised and performed on the fourth day after admission. An incision two inches long was made in the middle line above the umbilicus and the stomach drawn into the wound and carefully examined without result. The finger was then passed down into the right iliac fossa and the head of the pin felt at once in a portion of the small intestine immediately above the ileo-cæcal valve. The wound was slightly enlarged in a downward direction to allow the intestine, which was nearly fixed, to be brought to the surface. Two Lembert's sutures were passed, one on each side of the head, an incision made between them, and the pin extracted. The sutures were then tied, a third passed over them, and the intestine dropped back. The abdominal wound was then closed in the usual way. For some days the patient was exceedingly hysterical and suffered from various complaints, but recovery was uninterrupted from the first. The pain in the chest continued off and on until she was well.

CASE 2.—A man thirty-one years of age was admitted to hospital on Jan. 11th, 1894, with a history that the day before he had swallowed a plate with six false teeth attached to it. He had gone to bed without removing it and woke up with a fit of coughing. Suddenly he felt the plate slip and pass down his throat, giving him the sensation that he was choking. There was no hæmoptysis or hæmatemesis, but on coughing or swallowing anything solid he complained of a certain amount of soreness felt behind the middle of the sternum. There was no difficulty in swallowing, nor did the food seem to stick anywhere. A probang was passed on several occasions, and twice, as it was being withdrawn, when the point was eleven inches from the teeth, a faint rub was felt, as if it touched something hard. Nothing could be heard or felt when the probang was being pushed down, and although many attempts were made the foreign body was not felt (if, indeed, it was the foreign body that caused the sensation of rubbing, for of this there was some doubt) more than twice. Nothing was passed per anum. The patient felt perfectly comfortable and could swallow anything, so that at the end of a fortnight he was discharged. A twelvemonth later I heard accidentally that in a row in a public-house he was suddenly seized with such furious hæmoptysis that he died on the spot. The plate had ulcerated through the wall of the œsophagus into the aorta by the side of the left bronchus.

CASE 3.—A baby six months old was admitted to hospital in June, 1893, with the history that about six hours before the patient had swallowed the clamp of a feeding-bottle. The clamp was of metal in the shape of a cylinder half an inch long and three-eighths of an inch in diameter, with a screw projecting from its upper end. It had been felt in the child's mouth and had been driven lower and lower down by successive attempts at removal, until, at the time of admission, it had descended to the level of the top of the sternum. Its shape and the very small amount of space available rendered it impossible to extract it from above. The prospect of success if an attempt was made to remove it through an external incision was very remote, so it was decided that the best thing to do, as it had already travelled so far, was to endeavour to push it on. This was done with a gum elastic catheter, very slowly and gently, until at length it suddenly slipped into the stomach. The child suffered no further inconvenience and the cylinder was passed per anum two days later.

Remarks by Mr. MANSELL MOULLIN.—These three cases of foreign bodies in the alimentary canal are of somewhat unusual character. It is possible that the bonnet pin, which in the course of five days had already reached the ileo-cæcal valve, might have been passed naturally; but it is at least doubtful whether, with its length of over four inches, it would have succeeded in steering successfully round the fixed corner at the valve without catching. The pain and tenderness, which were so definite and so constant as to be considered to justify exploration when taken in conjunction with the history of the emetic, were in all probability subjective, as they continued off and on until the patient's health was restored, or there may have been some slight injury to act as a foundation for them. In the second case it is difficult to understand how a plate of such a size, carrying six teeth, could have succeeded in concealing itself so thoroughly. Probably its convex border fitted into a recess above the left bronchus, where there is sometimes a little dilatation of the œsophagus, and its concave one became coated over with mucus. It was only touched twice by the probang as the instrument was being withdrawn, never while it was descending, and the patient very soon lost all consciousness of anything being there, even when he swallowed solids.

SUSSEX COUNTY HOSPITAL.

A CASE OF SUTURE OF PERFORATED TYPHOID ULCER; NECROPSY.

(Under the care of Dr. HOLLIS.)

THERE have not been many cases of operation for perforation of typhoid ulcer in this country, and we need all the

records of cases submitted to operation, in order that some general rules may be agreed upon, and that the necessity for surgical help in such cases may be impressed on those in charge. Dr. Van Hook after a careful consideration of the question of perforation occurring in the course of typhoid fever came to the following conclusions amongst others: (1) there is no rational treatment for perforation in the course of typhoid fever except laparotomy; (2) when perforation occurs in typhoid fever the indication for operation is imperative; (3) the only contra-indication is a moribund condition of the patient; (4) collapse is often, at least temporarily, relievable by hot peritoneal flushing; (5) the stage of the fever is not to be considered as an indication or as a contra-indication for laparotomy; (6) the severity of the typhoid fever is alone not a contra-indication; (7) early laparotomy offers the most hope; (8) the symptoms of peritonitis should not be awaited before operating; and (9) the published statistics of laparotomy for this condition are strongly in favour of operation, &c. It is difficult to give a very favourable prognosis in any case of perforation of intestinal ulcer, and although the operation for closing it may have been done quickly and with the utmost skill there is in these cases of typhoidal perforation a greater tendency to recurring collapse and the many dangers of the remaining period of the fever have to be encountered and overcome. As the perforations in typhoid fever are nearly always in the lower part of the ileum a prolonged search is not usually necessary, the opening is generally small, and although the wall of the bowel is softened and friable, the insertion of sutures may be effected without much difficulty. It is advisable to close the opening at once and cleanse the peritoneum very carefully rather than make an artificial anus, although it is conceivable that in some instances such a proceeding might be the better one to adopt. There is a doubt if some of the cases published as such were really of the nature of those under consideration. For the notes of the case we are indebted to Dr. A. Stanley.

A man aged thirty-three years was admitted to hospital on March 6th, 1896, under the care of Dr. Hollis, with all the physical signs of typhoid fever—the enlarged spleen, the exanthem, diarrhœa, a continuously high temperature, bronchitis, and some distension of the abdomen. He had had headache and lassitude for eleven days before admission, but did not take to his bed until three days before admission. On the 10th there was hæmorrhage from the bowel. On the 12th perforation was indicated by increase of abdominal distension, absence of liver dulness and of abdominal respiratory movements, by pain, rigidity, and vomiting. He was seen by Dr. Hollis and Mr. Furner in consultation and an immediate abdominal section was resolved upon. The abdomen was opened in the middle line and the peritoneal cavity was found to contain gas, blood, and fæcal matter. The perforation was found eight inches from the ileo-cæcal valve, the ragged edge well inverted and Lembert's sutures were applied. The peritoneal cavity was washed out and the wound closed. The patient was very collapsed after the operation. He did not sleep the same night, and next morning the pulse was extremely feeble and running. There was some tympanites which was relieved by passing the rectal tube. Later he began to vomit altered blood, but after the stomach had been washed out with hot water this ceased. The pulse became still weaker. Three pints of normal saline solution were infused into the median basilic vein. He gradually became exhausted and died thirty-six hours after the operation.

Necropsy.—The peritoneal cavity was found remarkably clean, the coils of gut being covered here and there with thin lymph and the recto-vesical pouch containing a few ounces of blood-stained fluid. There had been no second perforation. The gut in the neighbourhood of the sutured ulcer was deeply congested. The sutures held well and the reparative process appeared to be taking place in a healthy manner, but at the lower end of the row of sutures the typhoid necrosis had just spread through to the peritoneal surface of the ileum; but there was no perforation. The interior of the ileum showed several Peyer's patches in a state of typhoid hyperplasia—thickening, but no tendency to sloughing or separation of sloughs except at the situation of the sutured perforation. Here the necrosed mucous membrane was well turned in so that fairly healthy peritoneal surfaces were apposed by the sutures, except at the lower part where there was some necrosis.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Malarial Hæmatozoon in Ashanti Fever.—Healing of Incisions in Vegetable Tissues.—Pneumonomycosis.—Exhibition of Specimens.

A MEETING of this society was held on May 5th, Mr. BUTLIN, President, being in the chair.

Dr. NORMAN MOORE read a paper on Malarial Hæmatozoon in Ashanti Fever. He pointed out that the hæmatozoon which resembled hæmamœba præcox occupied a red blood corpuscle. It was ovoid with a curved axis and contained in the middle some pigment granules. From its greater curve projected two small processes. In this circumstance it differed from any of Laveran's figures as well as from those of Marchiafava and Bignami. Projections from the surface of the corpuscle were shown in one of Laveran's figures, but they were the pointed ends of the crescent-shaped organism. The projections in this specimen did not appear to be flagellæ, but rather resembled the pseudo-podia of some protozoon. The blood was taken from the finger of the patient after proper cleaning and the specimen was at once exposed to osmic acid. The hæmatozoa were not numerous. The blood corpuscle generally seemed natural. A specimen examined two days before this showed only a very few spherical bodies with pigment. The patient was an officer who served in the recent expedition. He felt quite well on the way up to Kumasi, but on the way back was conscious of a slight degree of weakness and fever. After embarkation he rapidly became ill and at Las Palmas on the voyage home had a daily temperature of 104 F. and a continued fever. This diminished before his arrival at Plymouth and he was able to do duty on landing in the Thames. A week later he was obliged to go to bed, and from March 8th to 19th suffered from daily fever with an intermission of about four hours, accompanied by well-marked enlargement of the spleen and liver, much vomiting, and inability to take food. His other organs seemed normal. Some years before he had had acute endocarditis and had a febrile attack which did not recur and was probably not malarial at Wady Halfa. His highest temperature each day was about 102·5°, but sometimes reached 104°; the fever ceased on March 20th and he had no relapse. The specimen was taken about three hours before the usual hour of highest temperature, and up to that time he had had no quinine for a fortnight. Dr. Moore thought it was worth while to note the peculiarity of form in the hæmatozoon, even if it were but a circumstance in its phases of development and not a character indicating species.—Dr. MANSON asked if the specimen under the microscope was the only one with the peculiar projections and whether these projections stained with eosin or methylene blue. If the former he opined that the fact afforded evidence of their being part of the container and not the parasite itself. He had examined several specimens of blood from similar cases, and in all the crescentic form of the parasite was present.—Dr. MOORE, in reply, said that under a higher power it would have been easy to see that the projections were not stained by eosin but by the methylene blue. They were consequently part of the parasite and not an altered blood corpuscle. They had seen very few hæmatozoa and none as well marked as the one on view.—Mr. HUSSEY said they had found one other crescent, which he thought showed sufficiently distinct projections from the convex edge to make it seem probable, at any rate, that it was not due to pressure on the film during preparation. He himself had never seen anything like it before. He considered that there was no doubt that the projections stained with the methylene blue and not with eosin.

Mr. S. G. SHATTOCK read a communication on the Healing of Incisions in Vegetable Tissues, giving a detailed account of the different methods as studied experimentally by himself. The methods were comparable to those of first intention and third intention in the human subject. He commenced by adverting to the process of "immediate union," which assumed the reunion of the parts of cells actually divided. He had never observed this in plants in spite of every care, and he did not believe that it occurred in animal tissues, even in the case of such a cell as a leucocyte, for Hofer had shown that if an amœba be divided two individuals resulted, of which the one wanting the nucleus after

a while perished. Under healing of incisions in vegetable tissues by first intention Mr. Shattock stated that in general it consisted in cell division on either side of the face or plane of the injury, the remains of the cells laid open in the course of the incision became compressed, and as growth proceeded the line of these compressed remnants was interrupted or broken into segments by the interpolation of new cells. This was the most perfect process, occurring without any separation of the surfaces. Starch shed into the incision from the opened cells remained unchanged, doubtless because it was no longer within the sphere of living protoplasmic action; and its fate contrasted with that in slowly-dying branches, from which it was removed for consumption elsewhere, as happened in the life of ordinary foliage leaves. Sometimes the faces of the incision were separated by tension; the gap was then filled up by the growth of large callus cells from those bounding it. These callus cells might undergo secondary thickening, but no cork tissue was produced if the wound was sealed from the air, and it was upon this distinction that Mr. Shattock made the division into healing by first and healing by third intention. In the petiolus of Rheum rhaponticum a coagulable latex was shed into and filled the wound, and it hindered union just as blood-clot does in animal textures. Under third intention was considered the case where two surfaces were freely exposed and subsequently coalesced. Each of the surfaces under such circumstances became healed by the formation of a stratified layer of cork; but when they at length met, seeing that no further physiological reason existed for a protective production of cork, the latter was broken through by the subjacent parenchyma, which thus became continuous. This process occurred as the final stage in the well-known method by which denuded wood was covered over by callus in exogenous shrubs and trees, and it was commonly seen in grafting when no union took place between the cut surfaces, but between the callus from the cambium of the stock and scion. The analogy with the human process, however, differed in this, that the two surfaces were first healed by cork, whilst in animal tissues they remained granulating till brought together.

Dr. ARKLE read notes of a case of Pneumonomycosis in a young man twenty-two years of age. He had always lived a very healthy life and had never been ill. He was suddenly seized with gradually increasing dyspnœa and developed signs of very acute emphysema. Severe attacks of dyspnœa recurred from time to time and he became and remained markedly cyanosed. He continued in this condition for about four months, when he died in one of these attacks. Post mortem, on removal of the sternum both lungs bulged up through the opening and the heart was almost covered. Both lungs had large emphysematous bullæ upon them. The pleura was not adherent over the left lung, but on the right side there were loose but firm adhesions. On separating these and passing the hand to the posterior part of the thorax a gush of air escaped and the lung collapsed. Both lungs were enormously enlarged and over the back of the left lung the pleura was thickened and opaque. On section the lung tissue appeared more fleshy and coarser than normal. Under the microscope there were indications of universal emphysema. There was no sign of decomposition or mould in the preserving fluid and sections of the lung stained with logwood showed the lung to be greatly disorganised in places with microscopical cavities and breaking down of the substance of the organ. The walls of the alveoli were notably thickened, as were also the smaller bronchi. The parenchyma contained a good deal of pigment. Permeating the lung could be seen an extensive mycelial growth, very recognisable, although there was no evidence of fructification. The hyphæ were for the most part delicate network, and were jointed and branched, with well-marked varicosities in places. The mycelial growths lay mostly in small cavities, which they might have made for themselves. They appeared to be the aspergillus.—The PRESIDENT mentioned that a somewhat similar case had been brought before the society many years ago, though not under this name. He asked whether there was much expectoration and whether the sputum had been examined microscopically. He asked, further, whether the emphysema occupied the usual situation or was more marked in other parts of the lung.—Mr. SHATTOCK observed that the principal point to be cleared up was whether the mycelial growth was ante or post mortem. He recalled the fact that fungi had been known to grow in Müller's fluid, so that it was necessary to exclude that possible source of fallacy. He mentioned that Dr. Bristowe had first described the aspergillus growing in a healing cavity in the lung, but long before that Hunter had described it as growing in the crops of birds.—Dr. ROLLESTON recalled that Dr. Delépine had described what he called aspergillus niger taken from an ulcer of the leg in a patient at St. George's Hospital. He had cultivated it and his results had been brought before the society in 1890 or 1891. He added that the growth evidently irritated the bronchi either directly or by some secretion.—Dr. PARKES WEBER asked whether it was supposed that the fungus grew into the tissues during life or that this had taken place during the interval following their removal from the body before the lungs were placed in a preservative fluid.—Dr. ARKLE, in reply, said that there was not much expectoration and unfortunately the sputum was not examined microscopically. The emphysema occupied the lungs throughout, but was most marked in the usual situations—i.e., the anterior borders and the apices. He himself felt convinced that the growth took place during life. He admitted that he had seen fungi growing in Müller's fluid, but only after the lapse of years, never in such fluid as one would be likely to use. Moreover, the specimens gave evidences of vital reaction which he thought showed that the growth was during life. There were plenty of ways in which the patient might have inhaled the spores, and very possibly it had begun as a case of bronchomycosis becoming pneumonomycosis later.—Dr. PARKES WEBER added that if the sputum had been examined no doubt mycelium would have been found therein. It was, however, in all probability in the air-passages and not in their walls that it first grew, and its presence there would determine irritation and consequently reactive phenomena, so that this was not *per se* evidence of ante-mortem growth in the walls or parenchyma.

The following card specimens were exhibited:—

Mr. SYDNEY JONES: Bony Tumour of the Scalp.

Mr. J. R. LUNN: Aneurysm of the Inferior Thyroid Artery.

Dr. H. C. SHARP (Truro): Primary Colloid Carcinoma of the Bladder.

Mr. ST. CLAIR THOMSON: Angeioma of the Septum Nasi.

Mr. TARGETT: (1) Psammoma of the Dura Mater; and (2) Colloid Duct Cancer and a Sarcoma in the Same Breast.

Dr. ROLLESTON: (1) Myeloid Cells in a Mammary Sarcoma; and (2) Loose Body Encysted in the Surface of the Liver.

Dr. OGLE: (1) Aneurysm of the Heart; and (2) Embolism of the Coronary Artery.

BRITISH BALNEOLOGICAL AND CLIMATOLOGICAL SOCIETY.

Articular Gout and its Treatment by Natural Sulphur Waters.

AN ordinary meeting of this society was held on April 15th, the President, Dr. HENRY LEWIS (Folkestone), being in the chair.

Dr. R. FORTESCUE FOX (Strathpeffer) read a paper on Articular Gout and its Treatment by Natural Sulphur Waters, describing first the acquired variety of gout, which is less common than formerly, and is generally seen in men of a stout and plethoric habit. Its history not infrequently includes antecedent rheumatism or rheumatic fever; urate deposits are not a marked feature, excepting in the "occupation gout" of coachmen and some others, and the disease either tends to visceral degeneration or, under favourable circumstances, to gradual extinction of symptoms and a healthy old age. On the other hand, hereditary gout is most often seen in spare, active, energetic men, and, not being a "diet disease," it is not to be cured by dieting. Dr. Fox has found in his experience at Strathpeffer Spa that both forms of gout are favourably influenced by courses of sulphuretted waters, but that a routine treatment is generally disappointing. Baths are often altogether contra-indicated, and in determining the diet and general treatment it is important to ascertain in each case whether the disease is acquired and dietetic or due to a hereditary perversion of tissue change. Gout in women is nearly always hereditary, and the articular symptoms present a wide range, varying from recurrent attacks resembling those met with in men to the gradual chronic enlargement of the terminal phalanges known as Heberden's nodes. Gout in young women is sometimes met with in the articulations, as recurrent attacks of synovitis in the knee

or shoulder, and may simulate "rheumatoid" arthritis. Arthritis, however, in Dr. Fox's view, is a term that should be reserved for degenerative disease of the joints. In this sense there is a form of gouty arthritis met with in later life in which one or more joints (shoulder, knee, or thumb) become affected with degeneration as a result of slight injury. This form of "local arthritis" must be carefully distinguished from the generalised disease.

A lengthy discussion ensued, in which many speakers took part.

Mr. WALTER BLAKER (Bognor) said that he himself was the subject of gout. He considered diet to be an important factor in keeping symptoms in check, three days of butcher's meat producing gravel. He had suffered much from headaches since residing at Bognor and found that these and other gouty troubles were worse when there was an excess of ozone in the air. He had derived much benefit for the gouty joint from the waters of Llangammarch in Wales and also from those of Buxton.

Dr. OLIVER (Harrogate) said that with respect to diet he was strongly in favour of largely increasing the fluids and the vegetable derived elements and of reducing the proportion of the animal food to a minimum.

Dr. FERGUSSON (Great Malvern) was in favour of reduced diet, increased consumption of fluids, and hot baths.

Mr. CUFFE (Woodhall Spa) had seen very hot baths produce gout at Woodhall though there was no sulphate in the water. He mostly met with the asthenic form of gout and observed that many of his gouty patients ate enormously of meat. He approved of a dietary containing little meat and very little alcohol. He strongly advocated the use of the cold spray and douche.

Dr. FORTESCUE FOX, replying, said that in Scotland much whisky was consumed, but there was not much gout. He did not favour any particular local application to the painful joints.

LIVERPOOL MEDICAL INSTITUTION.

Spinâ Bifida.—Strangulated Ovarian Tumour.—Pyosalpinx and Blood Cyst.—The Insanity of Conduct and the Tests of Insanity.

A MEETING of this society was held on April 30th, Mr. CHARLES H. SHEARS, Vice-President, being in the chair.

Mr. THELWALL THOMAS read notes of two cases of Spina Bifida. 1. The patient was a woman aged thirty-two years who had a very large lumbo-sacral sac, having a circumference of twenty-four inches, which had burst. In it were two nerve-like structures which were excised and proved to be simple fibrous cords with no nerve elements therein. The neck of the sac was sutured with a Saddler's suture, reef-knotted each time the needles crossed, and a catgut ligature tied around. She made an uninterrupted recovery. 2. This patient was a child aged six years with sacral spina bifida; it was globular, three inches in diameter, and the whole of the posterior wall of the sacral canal was missing. Excision was performed and the redundant dura mater and arachnoid removed. Continuous sutures united the arachnoid and the dura mater, and over the new canal were folded two flaps of fascia from the gluteus maximus as additional protection. Leakage occurred, so the wound was reopened and a small orifice closed by buried silk sutures. The wound then healed slowly notwithstanding an attack of measles. Mr. Thomas has found forty-six cases on record of treatment by excision, with a death rate of 17·4 per cent. The Clinical Society's Committee's Report in 1885 gives Morton's own statistics: 50 cases, 9 unsuccessful, or 18 per cent. failures. The Clinical Society's 71 cases were treated by Morton's fluid with 27 deaths, or 38 per cent. They condemn excision on a published table of 23 cases with 7 deaths, or 30 per cent., apparently paying no heed to the cases treated before and those after the antiseptic era. If such had been done the result would have read: 16 cases before 1870, 6 deaths = 37 5 per cent.; 7 cases after 1880, 1 death = 14 2 per cent.; then their report might have been less directly adverse to excision.—Mr. R. W. MURRAY drew attention to the fact that hydrocephalus frequently followed upon the cure of spina bifida during infancy.

Dr. E. T. DAVIES read a case of Strangulated Ovarian Tumour. The patient was a woman aged forty-nine years who was known to have an abdominal tumour which was regarded as a myoma. Grave symptoms suddenly arose—diffuse peritonitis and stoppage of the bowels. At the end of a fortnight, the patient being collapsed and apparently moribund, laparotomy was performed. A strangulated ovarian tumour, universally adherent and quite black, was discovered and quickly removed. Recovery was uneventful.

Dr. E. T. DAVIES next related a case of Pyosalpinx and Blood Cyst. The patient was a woman aged twenty-nine years. She had been married eleven years and had three children, the last child five years ago. The menses were regular until two months ago, when she missed two weeks. There was a history of ruptured tubal pregnancy. At the operation pyosalpinx was found on the right side and blood cyst on the left. Sepsis followed with peritonitis, pus escaping from the lower angle of the wound. He thought the infection occurred in one of three ways: through the wound, from the stump of the tube, or from the gut, which was slightly injured near the cæcum.—Dr. IMLACH made remarks on the cases.

Dr. STANLEY GILL read a paper on the Insanity of Conduct and the Tests of Insanity. He pointed out that conduct was evolved from certain primitive movements, from random automatic movements, not psychically initiated, or rather those which seem to be independent of sensory stimulation; also from sensory-motor movements, which are conscious or unconscious, according as to whether they involve the cerebral cortex or no; and, lastly, from instinctive movements. He pointed out that these unacquired movements suffice to bring into play the motor mechanism of volition and thus supply experience. He said it was from experience so gained that we are enabled to direct our thoughts, feelings, and actions into the proper channels, and thus adapt ourselves to the particular environment in which we may happen to be placed. He defined conduct as the adjustment of the organism to its environment. The next part of the paper was devoted to the insanity of conduct, in which he showed the difficulties of defining insanity. He then drew attention to the three legal tests of insanity—namely, testamentary capacity, criminal responsibility, and a commission of inquiry as to the capacity of a person to manage himself and his own affairs. He did not believe in the test for criminal responsibility. Lastly, he quoted several cases to show that insanity meant something more than disorder of mind—namely, disorder of conduct.—Dr. IMLACH said that if conduct was three parts of insanity it was an argument against medical theories which attempted to explain insanity on animal physiology. Conduct was essentially a human act in accordance with reason or consciously opposed to it. The word could only be applied to the acts of an animal by analogy or to maintain a thesis. An animal always makes the best of its environment. Being what it is it could under given circumstances do no better. A man has a choice which the animal has not and which may lead him into a foolish or criminal act. When this freedom of choice has gone his actions are no longer strictly human. They stand apart as lunatic. An expert witness is able to point out facts which a jury might overlook, but the practical decision rests with the jury, for this is not a question of science but of common sense.—Dr. PERMEWAN, Dr. STANSFIELD, and Dr. Ross took part in the discussion.—Dr. GILL replied.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.—A dinner in aid of the funds of the City of London Hospital for Diseases of the Chest, Victoria-park, E., was held on Tuesday evening last at the Whitehall Rooms of the Hôtel Métropole. Lord Wolverton, who presided, showed in his speech that the income of the hospital was sadly below the necessary expenditure, and donations to the amount of about £2000, inclusive of 100 guineas from his lordship, were announced.

THE Prince of Wales made a surprise visit on Tuesday afternoon last to Guy's Hospital and spent a considerable time in inspecting the wards, pathological museum, college, and medical and dental schools. His Royal Highness expressed himself as much gratified by the report made to him of the satisfactory progress of the fund at the festival dinner, in support of which he has promised to preside. The impression that the fund is already adequate to the necessities of the charity is authoritatively contradicted at the Prince's request, as being likely to prejudice the success of the appeal.

Reviews and Notices of Books.

Twentieth Century Practice. Edited by THOMAS L. STEDMAN, M.D. Vol. IV.: Diseases of the Vascular System and Thyroid Gland. London: Sampson Low, Marston, and Co. 1896. Pp. 841.

THIS volume treats of diseases of the vascular system and thyroid gland. Dr. James T. Whittaker of Cincinnati writes the general article upon Diseases of the Heart and Pericardium, which occupies rather more than half the volume. It is no easy matter within moderate compass to treat with adequate fulness so large a subject. In Dr. Whittaker's work no important condition has been omitted, and its means of diagnosis, the elements of prognosis, its causation, and its treatment all receive attention. The important *rôle* assigned by "twentieth century" opinion to the influence of microbes in the production of endocardial inflammation is very properly emphasised, and the reader will find in these pages a sufficient presentment of current views upon the nature and management of diseases and disorders of the heart. After perusal of the article we can say so much in our desire to criticise as justly and as gently as possible—a task the difficulties of which we do not under-estimate. But there are some features in this article to which we take serious exception. As a work of reference it is not useful. In the 454 pages of the essay there is not a single reference. With very few exceptions we cannot gather whether the illustrations are original or copied, and in places secondary sources are mentioned in such a manner that if we knew no better we should regard them as original authorities. Thus, the illustration of pericardial effusion with displacement of the liver might have been executed for this volume did we not know that it was copied from Sibson's monumental article in "Reynolds's System of Medicine." On the other hand, a transverse section of the usual hypertrophied ventricle of aortic disease is carefully noted as copied from Ziegler's original. The dangers of information at second hand, are well illustrated in Dr. Whittaker's narrative of the discovery of coronary atheroma in its relation to angina pectoris. Dr. Whittaker gives Fagge as his authority. We here learn that Jenner suggested coronary occlusion as the cause of angina in a letter addressed to Heberden in 1778, but which he did not send out of consideration for the feelings of John Hunter, who suffered from the disease. We also learn that "Jenner (1775) first saw the calcification of the coronary arteries in an autopsy which was being made by John Hunter" (p. 439). With regard to these statements we cannot discover (1) that Fagge is responsible for this information, (2) that Jenner wrote an unsent letter to Heberden, and (3) that he saw calcified coronary arteries in any dissection made by John Hunter. As a matter of fact, Jenner's communication was made to Parry of Bath, whose essay was published in 1799, and the date of Jenner's letter cannot be fixed unless Dr. Whittaker has seen the original or some fuller excerpt, which, so far as we know, does not exist. With regard, moreover, to the dissection by John Hunter to which he refers, Jenner expressly states that to the best of his belief the coronaries were not examined in that case. "Fagge," again, relates the sudden death of Dr. Chalmers from angina pectoris, and no mention is made of the masterly essay on angina by Gairdner of Glasgow in "Reynolds's System of Medicine," the literary and scientific qualities of which render it a model for medical authors, and which was Fagge's source, as also Fothergill's, for the particulars of John Hunter's illness. Surely Gairdner's essay is as accessible as Fothergill's book! Fothergill, however, in the pages before us might pass for the original authority, notwithstanding his own express statement to the contrary. This is not, we trust, hypercriticism. We desire at all times to adhere to kindliness, checked by what we consider justice, as a sound canon of criticism, but these inaccuracies impair our confidence in a work which, without doubt, contains much valuable and correct information.

The section on Diseases of the Bloodvessels is from the pen of Dr. Arthur Ernest Sansom of London. Much of the material is the result of original investigation. There is a good account of the clinical history and gross and microscopic anatomy of acute and chronic aortitis. We do not, however, think that the evidence he adduces in favour of influenza being causal of the condition in some cases is conclusive (p. 460). His remarks upon the diagnosis of aneurysm of the aorta are excellent. The criteria for forming an opinion in these cases, so frequently obscure, but in which the necessity for coming to a correct conclusion is of great moment to all concerned, are given with a lucidity and practical insight very desirable in treating this subject. His views on the treatment of some of the conditions discussed are very judicious and sufficiently full to be of real service to those consulting this work. We would especially instance his rational indication of the place of digitalis in the treatment of the failing heart of atheroma. We observe (p. 546) that he classes the epileptoid phenomena of bradycardia with *petit mal*. For ourselves we think the weight of argument is with those who regard the cerebral phenomena of this condition as a mere index to the syncopal failure of the heart. The whole essay, however, will repay perusal, both by the expert and tyro, and is calculated to be a trustworthy guide in diagnosis and treatment.

In his article on Diseases of the Lymphatic Vessels Dr. Bertrand Dawson has in forty-two pages given as good an account of the affections of these vessels as any with which we are acquainted. Sufficient references are made to the anatomy and experimental and clinical pathology of the conditions in question to sustain the interest of the reader and instruct him by an indication of the *rationale* of observed cases. Mention is made not only of the results of direct obstruction of the lymphatic vessels, but also of the consequences of back-pressure, due to heart disease, in the various channels into which the thoracic ducts debouch. Cases which have been reported and in which there has been a leakage of chyle into the various cavities of the body are not common. Dr. Dawson has therefore been able to quote interesting particulars from original sources in some instances. To weigh cases, as Morgagni has it, is frequently more important than to count them, and the careful study of a few typical examples is often more instructive than the elaborate conclusions of fallible statistics. Dr. Dawson has weighed his cases well, and has produced a readable and instructive account of the diseases with which he has dealt. A complete list of authorities consulted is appended, with, in most instances, page-references, which is as it ought to be.

Diseases of the Thyroid Gland are very ably treated by Dr. George R. Murray of Newcastle-on-Tyne. His article on Myxœdema is especially valuable and contains much clinical and general information of the first importance, as we should expect from one who has devoted so much attention to a subject with the practical development of which his name is honourably associated. The slighter cases, most difficult of diagnosis, are considered, as well as those more pronounced with which we are now so familiar. Nothing is more remarkable in connexion with this disorder, recently so hopeless and obscure, than the diffusion of knowledge on the subject, so that facts but recently observed are as familiar to the profession as many connected with diseases much longer known and treated. This is probably owing to the close association of real benefit to the patient with learned discussion by the physician, conditions which do not, unfortunately, invariably go hand in hand. Thyroid extract, although so beneficial in its action, requires care

in its use in some cases, and the precautions necessary in its employment are set forth clearly in this article. With reference to Exophthalmic Goitre Dr. Murray argues strongly in favour of its production by an excess of thyroid secretion in the blood, just as myxœdema is due to its deficiency. There is undoubtedly much to be said in support of this view, but there are still, we believe, considerable lacunæ in the argument. As Dr. Murray states (p. 811), there are, indeed, some cases of ordinary goitre which exhibit one or more of the symptoms of exophthalmic goitre, but this is by no means the rule, and did the latter condition depend solely upon excess of thyroid secretion in the blood we should expect it to be observed more frequently than it has been at some period in the development of ordinary goitre. The earliest description of an undoubted case of exophthalmic goitre Dr. Murray attributes to an anonymous writer in 1816. There appears, however, to be considerable justification for the Italian synonym, "morbo di Flajani," for Virchow states, according to Warburton Begbie, that "Flajani was the first to notice the coincidence of goitre with lasting palpitation of the heart." Nor do we think Dr. Murray sufficiently acknowledges Dr. James Begbie's contribution to our knowledge of a disease which some desired at one time to call by his name. These are, however, small matters, and the use of a patronymic nomenclature has many objections. This article may be recommended as affording a very adequate account of the diseases with which it deals from the point of view of the physician, for surgical questions are not treated in detail.

After careful perusal of the whole volume, and excepting the strictures we feel it our duty to pass on the first article, we can recommend it as a valuable and trustworthy exposition of present-day views on the matters treated. There is a good general index and the publisher's work has been well done.

Recherches Bactériologiques sur l'Étiologie des Conjonctivites Aiguës et sur l'Asepsie dans la Chirurgie Oculaire. (*Bacteriological Researches on the Etiology of Acute Conjunctivitis and on Asepsis in the Surgery of the Eye.*) Par le Docteur V. MORAX de la Faculté de Paris, Ancien Interne des Hôpitaux de Paris. Paris: Société D'Editions Scientifiques, 4, Rue Antoine-Dubois. 1894.

THIS work contains the results of the researches of Dr. Morax with regard to the application of bacteriological knowledge to ophthalmic surgery, especially in connexion with conjunctivitis, both as regards diagnosis and treatment. Accepting the bacteriological fauna of a normal healthy eye and appendages as given by Fick, Combert, Marthen, and others, he has paid special attention to the microbes that are found in conjunctivitis, and has tried to estimate their importance in connexion with the complications that may arise during the course of the disease or as the result of interference by treatment, especially, of course, in relation to the prevention of septic conditions following operative treatment. He comes to the general conclusion that acute conjunctivitis can only be classified according to its etiology, as the symptoms are in many cases almost, if not absolutely, identical, even when the etiological factor differs. He is convinced that contagious acute conjunctivitis occurs most frequently; it can be set up by inoculation and may be met with in all stages, from a comparatively slight attack of catarrh to the most characteristic purulent conjunctivitis, sometimes accompanied by corneal lesions. He looks upon the microscope as being the best diagnostic instrument in cases of blennorrhagic and other forms of infective conjunctivitis, whether they be the benign form, characterised by the presence of the pneumococcus, or the acute, associated with the streptococcus, especially when accompanied by a similar inflammation in the lacrymal ducts. In connexion with the aseptic treatment of diseases of the eye Dr. Morax points out that pathogenic microbes are very rarely found in the conjunctival *culs-de-sac* in the healthy condition, but that in certain diseases pyogenic organisms are often found. He points out, however, that the importance of the presence of bacteria in these sacs is sometimes unduly magnified and that a just appreciation of their importance in any special case can only be arrived at after a careful bacteriological examination. In all cases instruments used for operation should be carefully sterilised by means of heat. The only asepsis possible is that obtained by washing, and as in this class of cases this acts mechanically and not chemically he recommends the use of sterilised water, which does not irritate the eye and which gives quite as good results as chemical antiseptics. He recommends, of course, a careful and regular removal of all secretions, especially where there is any tendency to inflammation.

The work throughout is evidently based on careful observation, and although the observations of others have not been entirely passed over Dr. Morax relies to a very great extent upon his own experience as a basis on which to found his conclusions and recommendations.

Fear. By ANGELO MOSSO. Translated from the Fifth Edition of the Italian by E. LOUGH and F. KIESOW. Pp. 278. London: Longmans, Green, and Co. 1896.

THE name of the Turin professor is familiar enough to physiologists, and it is pleasant to meet the inventor of the plethysmograph and the well-known student of the cerebral circulation on more popular ground. The interest which his little book on "Fear" has aroused in its original Italian fully justifies its translation into English, and Messrs. Lough and Kiesow have done good service in the admirable translation here presented. Professor Mosso is much more than an accomplished physiologist: he shows himself a man of wide culture and a careful student of human nature; he is, further, master of a literary style at once luminous and picturesque. The strange combination of accurate scientific observation with real and unaffected sentiment and a remarkable power of vivid illustration make the book very unusual and attractive reading to the more phlegmatic temperament of our northern climate. It is an essentially popular book, which will interest the general reader as well as the physiologist and the physician, but accuracy has not been sacrificed to general effect. The author is a disciple of Darwin and Herbert Spencer, and not of Weiss mann, but he differs from the first-named in several points. Many will agree with him that "The Expression of the Emotions" is not one of Darwin's greatest works, and it is natural enough that the progress of experimental physiology should offer simpler and more direct explanations of phenomena—such, for instance, as blushing, which Darwin attributed to the effect of self-consciousness acting on the vaso-motor nerves. The Action of the Central Nervous System, the Circulation in the Brain during Emotion, the Beating of the Heart, Oppression of Respiration, Trembling, the Physiognomy of Pain—these are some of the headings of the sixteen chapters in which Professor Mosso elaborates his subject. His illustrations and conclusions are always interesting, the final chapter on Education being particularly valuable and suggestive; and the book will not fail to captivate the reader by its style, even though he may not agree with its author in every respect.

LIBRARY TABLE.

Love Fugue. JON. B. FROST, Atlanta, U.S.A. London: The Roxburghe Press. Price 2*s.*—"So, departed shade of my weary Aunt, forgive my life! Forget or palliate my word! I but live a life for which occasion has not yet

occurred to be thankful." Why the Roxburghe Press have sent us this remarkable book we cannot say, for it is a perfect specimen of what Mark Twain calls hog-wash. The sentence we have quoted will give an idea of the chastened style in which it is written. Here is another gem: "You judge the conduct, did not observe the lady, her clean face, her eye brilliant with mischief, her fine forehead shown by the artful arrangement of her frizzes ..... she was embarrassed, if bad she would not have been abashed. Did you fail to observe that she was met by a motherly woman who may have been her aunt and borne from the depot in a private carriage? Everything indicated that she is vivacious—nothing that she is vicious." The opening words of the author are "I know not why I yet live." Neither do we.

Willing's British and Irish Press Guide for 1896, price 1*s.* published at 162, Piccadilly, contains the usual particulars concerning the press of the United Kingdom, together with a list of the principal colonial and foreign journals and a variety of general information.

Dod's Parliamentary Companion for 1896. London: Whittaker and Co., Paternoster-square. Price 4*s.* 6*d.*—The seventy-second edition of this well-known and indispensable book has reached us, carefully revised and brought up to date; it thoroughly deserves the popularity it enjoys.

JOURNALS AND MAGAZINES.

The *Practitioner* for May devotes its pages to vaccination in view of the coming 14th of May, the date upon which Edward Jenner performed the first vaccination on the body of one James Phipps. The editor remarks upon the extraordinary lack of appreciation shown by this enlightened country with regard to Jenner and his work. In this we cordially agree. A man who slays his thousands is honoured, and rightly, with dinners, orders, medals, and pensions; while he who has delivered his tens of thousands from one of the most horrible diseases known to humanity is passed by as no one. Perhaps the greatest praise and most striking commentary upon Jenner's invaluable services is to be found in the recent epidemic at Gloucester, and we would suggest (1) the inscription on the pedestal of the statue of Jenner in Kensington Gardens in large letters of—(*a*) the numbers of those attacked with small-pox; (*b*) the deaths; and (*c*) a tabular statement showing the proportion of deaths to vaccinations; while upon the other side of the pedestal should be the names of the anti-vaccination guardians and the members of the anti-vaccination societies—"These are raging waves of the sea foaming out their own shame ..... murmurers, complainers, walking after their own lusts." In the original communications Dr. Monckton Copeman writes on Small-pox and Vaccinia, their Manifestations and Inter-relations in Man and the Lower Animals; Dr. Buist upon Natural and Cultivated Vaccine; Dr. Colcott Fox upon the Accidents of Vaccination, a most valuable paper; and Dr. Edward Seaton upon Compulsory Vaccination from the Legislative Point of View. Dr. Edwards's paper upon Vaccination and Small-pox Statistically Considered ought to be in the hands of every guardian. The hero of medicine for the month is, of course, Jenner, and the medico-literary causerie, Small-pox before Vaccination.

The *Quarterly Medical Journal for Yorkshire and the adjoining Counties* has an interesting paper by Dr. Norman Moore upon Tuberculosis and an admirable plea for greater purity in medical nomenclature by Dr. C. A. Greaves. Dr. Crochley Clapham cites an interesting case of Congenital Absence of the Uterus. Dr. Preston King has a good paper upon Bath as a Health-resort.

The *Birmingham Medical Review*.—Mr. Oliver Pemberton has an appreciation of the late Sir William Savory worthy both of the writer and his subject. Mr. Jordan Lloyd discusses the Curability of Cancer of the Uterus, his conclusions being summed up in the words, "Operate early if you can." Dr. Simon writes upon the Treatment of Typhoid Fever, and Dr. Sydney Short reports a very interesting case of death from some mysterious cause, probably cerebral. Dr. James Russell reports a case of Cerebral Thrombosis with some very Unusual Symptoms. There is an interesting "note" upon Provident Medical Aid.

In the April number of the *American Journal of the Medical Sciences* Dr. J. J. Thomas of Boston discusses Twenty-nine Cases of Diphtheritic Hemiplegia recorded by various authors, and describes two cases which had come under his own observation. Dr. J. H. Etheridge of Chicago gives a very full account of three cases of ovarian abscess caused by the micrococcus lanceolatus (diplococcus pneumoniæ, pneumococcus of Fraenkel and Weichselbaum). He believes that although this organism is a well-known cause of many inflammatory processes there has not until now been any record of ovarian abscess due to it. Dr. Chittenden and Dr. Mendel conclude their articles on the Influence of Alcoholic Drinks on the Processes of Digestion.

The *Edinburgh Medical Journal* for May has two instructive articles on Osteomalacia, in one of which Dr. James Ritchie summarises the results of numerous observers and describes in detail several cases attended by himself. One of the patients took both white and red bone marrow without any apparent benefit, but improved very much after undergoing oöphorectomy. Dr. T. M. Allison gives an elaborate account of another case of the same disease in which there was visible improvement at the end of a week from the commencement of the bone-marrow treatment, and after seven months the patient's condition was greatly changed for the better. Dr. J. W. Ballantyne writes on Congenital Teeth and Dr. W. G. Sym on Ophthalmia Neonatorum.

Journal of Mental Science. April, 1896.—From a clinical point of view the current number of this quarterly perhaps does not present so many features of interest as usual. One of the articles is original in more than one sense. It emanates from the pen of a gentleman who suffered from temporary mental aberration, from which he happily recovered, and he depicts in vivid language the strange impressions and visual hallucinations which troubled his perverted mentality. Dr. Hyslop contributes a suggestive paper on "Pseudo-general Paralysis" which is referred to in another column of our present issue. There is no doubt that his argument is well founded when he states that many cases, of which he gives examples, are really not cases of general paralysis *per se*, but rather of special paralysis with insanity. A temperately written article on the occurrence of insanity amongst the prison population ought in a measure to remove much of the misconception that appears to exist regarding the origin and causation of mental disease in prisons. The psychological and therapeutic retrospects, as usual, contain valuable information.

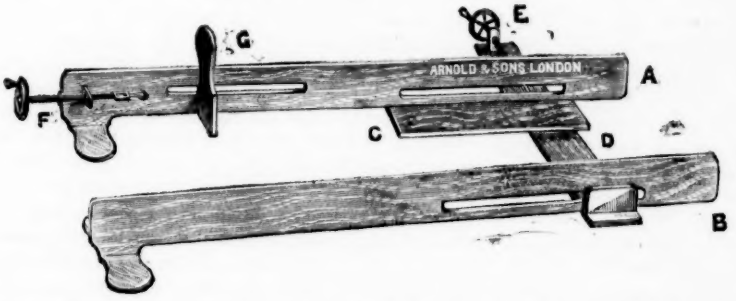
MESSRS. N. M. ROTHSCHILD AND SONS have sent 50 guineas to the Royal Hospital for Diseases of the Chest, City-road, E.C., towards the fund being raised in connexion with the festival dinner to be held at the Hôtel Métropole on May 26th.

MEDICAL MAGISTRATES. — Mr. Sydney L. Richardson, L.R.C.P. Edin., M.R.C.S. Eng., has been appointed a Licensing magistrate for the district of Queanbeyan, New South Wales.—Mr. Leonard L. Seabrook, M.B. Ch.B. Adel., has been appointed a Justice of the Peace for South Australia.—Mr. R. A. H. Williams, L.R.C.P., L.R.C.S. Edin., of Fermoy, has been appointed by the Lord Chancellor to the Commission of the Peace for the county of Cork.

New Inventions.

IMPROVED HIP-SPLINT.

APPRECIATING the difficulty of obtaining bony union in all fractures about the hip-joint (and this I take to be due to want of proper apposition with consequent want of proper fixation of the bony fragments and neglecting to fix the entire pelvis during treatment), the splint I have had made for me by Messrs. Arnold and Sons of West Smithfield meets all these requirements. It consists of two long side-splints A B, with sliding foot-piece G, and by thus fixing both lower extremities the pelvis is fixed. Extension is obtained by means of screw F. The hip-joint is prevented from sinking into the bed by the back-splint C, which is movable along the slot. To obtain absolute approximation of the fragments in capsular fractures pressure must be made on the great trochanter of the injured side, and this is provided for by the screw E, which, when turned gradually, approximates the upper ends of the two long side-splints. The splint is reversible, so that it may be used for either side of the body; also, as it is detachable, one side-splint can be used if required.



A. HERBERT BUTCHER,
Surgeon to the Birkenhead Borough Hospital.

THE "UNIVERSAL" TEAPOT.

TEA properly made should be an infusion and not a decoction, but the vessel in which this beverage is ordinarily prepared is more adapted for the latter process than the former. In our issue of Nov. 30th, 1895, we described a new tea infuser from which we obtained very satisfactory results, but the peculiarity of its construction rendered it practically useless unless a full pot of tea was required. The object to be aimed at in the construction of a really good teapot is, of course, the separation of the spent tea leaves from the hot infusion; and this Messrs. George Donald and Co., of Central-chambers, Glasgow, seek to accomplish by attaching to a chain, which passes through the lid of the pot, a small vessel for containing the tea (see illustration). This vessel or infuser is allowed to rest at the bottom of the pot until the tea is "drawn" and is then elevated into the lid by means of the chain and kept in position by a pin passing through one of the links. The "Universal" teapot is made in brown ware, stone ware, and china, the best materials of which teapots can perhaps be made; and for the end in view—namely, the making of an infusion and not a decoction—the contrivance is almost all that can be wished. We would point out, however, that it is far from desirable to use a brass chain however heavily it may be plated with silver (in the present instance it is triple plated), as the contact of the two metals is likely to set up an electrical action. A chain made from pure aluminium would be far preferable.

NUTRIENT SUPPOSITORIES.

THE nutrient suppositories for rectal feeding manufactured by Messrs. Parke, Davis, and Co. are about an inch long and half an inch in diameter at the base. Each contains about 125 grains of fresh lean beef almost entirely peptonised. They are firm in consistence and have a smooth, dry surface.

GELATIN CAPSULES.

MESSRS. PARKE, DAVIS, AND CO., of 21, North Audley-street, Grosvenor-square, have forwarded to us samples of their improved empty gelatin capsules, by the use of which the difficulties of administering unpalatable powders are reduced to a minimum. The capsules are made in ten sizes, differing greatly in their several dimensions, but all on the same principle. The larger sizes very much resemble short, round-ended, glass test-tubes, such as are used by chemists everywhere, but are without the ordinary everted border, and have a well-fitting cover, consisting of a similar but shorter tube sliding over the other. For administration by the mouth they are made in seven sizes, the smallest of which is about as large as an ordinary three-grain pill, and will contain either three-quarters of a grain of sulphate of quinine or one grain of powdered aloes or rhubarb. The largest of these is about a third of an inch in diameter and one inch long when closed; it will hold eight grains of sulphate of quinine and about ten grains of powdered aloes or rhubarb. By means of them it is also easy to swallow nauseous uncoated pills without tasting them. The capsules are hard but elastic, they are smooth, the covers fit well, and the shape is convenient for being swallowed, but if held in the mouth they dissolve before long. There are also three sizes having a tapering end for rectal administration and three for veterinary and vaginal capsules. The latter are convenient for the local application of medicated cotton. A special filler is supplied for powders and pills.

THE LANCET.

LONDON: SATURDAY, MAY 9, 1896.

THE action in which Mr. and Mrs. ARTHUR KITSON claimed damages from Dr. and Mrs. PLAYFAIR for publishing a slanderous statement concerning the female plaintiff has now come to a definite conclusion. At the trial before Mr. Justice HAWKINS the defendant denied publication and claimed privilege. No plea of justification was put on the record, and consequently the presiding judge would not allow charges aspersing Mrs. KITSON'S character to be made in Court. Of course, it was impossible to present the case to the jury without bringing out the salient facts upon which the alleged slander was founded. It is not necessary for our present purpose to give a detailed account of these facts. Suffice it to say that Mrs. KITSON, who had been in England for over a year—her husband remaining abroad—suffered from metrorrhagia for some weeks. At her suggestion, or with her consent, her medical attendant sought the aid of Dr. PLAYFAIR, whose wife was the sister of Mr. KITSON. On two occasions a direct examination was made, and on the latter a substance was removed from the uterus which Dr. PLAYFAIR judged to be the product of a recent conception. In a correspondence on the subject Dr. PLAYFAIR informed Mrs. KITSON of the opinion he had formed and intimated to her that he could only keep intact the seal of professional secrecy on condition that she left London and broke off social intercourse with his immediate family circle or that she could show that she had seen her husband within a period which would remove the grounds of the charge of unchastity. From first to last, though she had to face as terrible a situation as it is possible to imagine a wife and mother to be placed in, Mrs. KITSON persisted in her innocence. Dr. PLAYFAIR not finding his suggested terms of compromise accepted informed his wife and also Mrs. KITSON'S brother-in-law of the facts and the deduction he had drawn from them. This was the slander complained of and on which issue was joined in the High Court.

Although the case is one of profound interest from a medical and pathological standpoint we intend at this moment to discuss it only on the lines presented to the Court. At the trial the verdict went against the defendant, the jury finding that there was publication with interested motive and express malice on the part of Dr. PLAYFAIR. An appeal was entered against the verdict, but when the time arrived for it to be heard terms were agreed upon between the parties to the suit and thus the litigation ceased. It is not within our province to criticise the questions of law as laid down by Mr. Justice HAWKINS at the trial or to challenge the findings of the jury. The former must be taken as an equitable presentment and the latter to embody the opinion of twelve unbiased men upon their oath. But beyond the four corners of the law there is ample field for meditation. Never was the question of professional etiquette more forcibly presented. It must be allowed that there is no written code to guide a practitioner in every case in which his discretion and judgment are evoked. There are those which it would be subversive of all moral rule to divulge. There are those which it is his bounden duty to disclose; but on the frontier between compulsory secrecy and publication there are many instances every one of which must be decided upon its particular merits. It may be held to be a safe formula that, unless there are overpowering reasons to the contrary, a patient's secret should be held inviolate by his medical adviser almost, if not quite, as binding as the confessional of the Roman Catholic priesthood. Where it involves the actual commission of crime, morality and justice require the breaking of a confidence which the recipient should never have been asked to accept. Where it is supposed an illegal act is contemplated the line of action is not so clear. Mr. Justice HAWKINS had in mind such a contingency when he asked Sir JOHN WILLIAMS what he conceived would be his duty if consulted professionally in a suspicious case of criminal abortion. Sir JOHN WILLIAMS without hesitation replied he would communicate with the Public Prosecutor. "I am not so sure you would be doing right," came the rejoinder of the learned judge. There is much to be said on both sides. In the first place, it is obviously every one's duty to prevent the immediate commission of a crime and to deter from more remote repetitions of such. Moreover, failure to guide the hand of justice may strengthen the evil intents of ill-doers. We should say, on the other hand, that unless the information possessed by the medical practitioner is sufficiently weighty to make it reasonably certain that the allegation will be sustained it is better to observe a discreet silence.

Reverting to the basis of our special commentary we feel it our painful duty to assent to the proposition that Dr. PLAYFAIR did not act as discreetly as he might have done. Was it wise to place such alternatives before Mrs. KITSON as it was proved in evidence he did place? To a statement in one of Mrs. KITSON'S letters to him suggesting, though not defining, an explanation of her innocence he lent a willing ear, although there was no evidence forthcoming that there was reasonable probability of the existence of such grounds of exculpation. We refer to the question of a visit to England by Mr. KITSON. It seems that at that time Dr. PLAYFAIR was struggling between two opposing forces—the one compelling him, out of human pity and from a sense of professional duty, to keep secret the conclusions at which he had arrived; the other to shield his family from the pollution which, he thought, further social intercourse would entail. Whilst recognising his perilous position it would have been well, we think, had he sought in confidence the help and advice of some distinguished members of the profession. In so doing he would have proved better than in any other way that midst all his undoubted difficulty and trouble he was striving to act justly between man and man. Although we are unable to endorse as fully as we could have wished the course and

tenor of his action, we cannot but regret his misfortune and tender the sympathy such misfortune claims.

FOR some years past the study of the errors of refraction in the eye has been earnestly pursued in America. The journals devoted to ophthalmology in that country, which are many and excellent, are remarkable for the number of important articles they contain on the symptoms and methods of treatment of the defects of vision arising from these errors. They discuss at great length and with much ingenuity not only the ordinary defects of myopia, hyperopia, and astigmatism, but those conditions of imperfect vision that are dependent upon, or that are associated with, defects of the nervo-muscular apparatus of the eye and which are capable of being alleviated or altogether remedied by appropriate treatment with lenses and prisms. These articles, primarily addressed to the instructed ophthalmologist and presupposing a thorough and complete medical education, are, of course, accessible to the public and therefore to the optician. Partly as the result of knowledge gained from such sources, partly from observation of the successful means adopted by experts and of the trials and essays, and it may be of the failures of such experts in difficult cases, and partly from information acquired by the desire to carry out in an intelligent manner the orders of the surgeon, the optician has of late years stepped in and now not only claims the selection of glasses as a branch of his work for which he believes himself to be specially fitted, but contends that it is no part of the duty of the medical practitioner to treat such cases at all, especially since in most cases he has neither the apparatus required for testing vision with accuracy or the knowledge which would enable him to select the glasses that would remedy the defect. As a matter of fact, few practitioners in the country, or even in large towns, feel themselves to be competent to undertake the treatment of defects of the eye requiring the use of glasses, and as a rule send such cases to some friend in whom they have confidence and who is practising exclusively as an ophthalmic surgeon. But, as an American contemporary remarks in a leading article devoted to this subject, it is certain that we are entering upon a prolonged period of controversy and even warfare with the opticians. In the State of New York a determined attempt, it is said, is being made to secure the passage of a law which shall recognise jewellers and spectacle vendors as "official refractionists," whilst the physician or professed ophthalmologist is to be relegated to the position of one who shall treat only diseases of the eye whether by medicines or the knife.

In England the contest has not arrived at quite so acute a stage, and we are inclined to think that it may, with a little generosity of feeling and action on both sides, be altogether averted. For one thing, it is quite certain that no legal enactment could be made so stringent as to prevent a man from walking into an optician's shop, trying for himself a pair of convex or concave spectacles, paying for them, and walking out again. He takes the risk of the numbers being correct and may or may not be helped or aided in his selection by the optician with whom he deals. If after one or two trials he finds them unsuitable he probably applies to an ophthalmic surgeon and no harm is done. Hundreds of pairs of glasses are thus purchased daily, and it is difficult to see what exception can be taken to the transaction. On the other hand the optician entirely misses the point of the discussion when he contends that he is as capable as the ophthalmologist of determining the glasses that are required in any given case. Freely according to him the benefit of the doubt that he can supply the appropriate glasses as well as the ophthalmic surgeon can, the real question is, Are glasses required at all? To prescribe correct concave or cylindrical glasses for a case of short sight is not a difficult matter, and any intelligent man might learn to do so in a few months; but it is impossible to impress too strongly on the optician the fact that although the selection of appropriate glasses is an important matter, it by no means comprises the whole treatment of myopia. The case may be one in which a delicate child from a spirit of emulation is working hard and is actually developing the defect. Would any optician say to the parents: These glasses give your child perfect vision, but I strongly recommend you *not* to purchase them? We apprehend not. Yet this is precisely the advice that every ophthalmic surgeon has to give, not once or twice, but repeatedly to those most interested. Avoid glasses, he will say; send the child into the country and do not let him look at books. Again, there are various conditions of the eye which require a quite special medical training to recognise, and which are temporarily benefited by glasses, but which, if treated with them alone, are likely to lead to loss or great impairment of vision. Let us take glaucoma, for example. A sufferer in the earlier stages applies to an optician, who with his tests makes out accurately enough the number the patient requires. Within a month the latter becomes dissatisfied and applies to another optician, who supplies him with another and stronger pair of glasses with the same results. At length he calls in the aid of an ophthalmologist, is then told the nature of the disease, and is informed that an operation is imperative—an operation that might have been avoided had he been in the first instance examined by an expert. In many—nay, in most—instances the physical condition of the patient, the family history, the nature of his work, and, still more important, the internal changes which become apparent under the ophthalmoscope are all duly weighed by the surgeon and their influence for good or bad considered before glasses are prescribed. How can the most experienced optician discuss these points with his customers? It is quite true that the average practitioner, who during his student career has given but little attention to the eye, would certainly be beaten by a practical optician in the selection of appropriate glasses; but we would infinitely rather rely upon the judgment of such a practitioner than upon that of any optician as to whether glasess should or should not be worn.

Taking the lowest and most commercial aspect of the question, we cannot see that the optician would lose by sending to a duly qualified ophthalmic surgeon the cases that apply to him for relief. No ophthalmic surgeon in Great Britain supplies glasses; the patient must obtain them from some optician, and it would be rare indeed for

a patient sent by an optician to be directed to apply to some other tradesman. We are inclined to think that English opticians will make no attempt to encroach beyond the reasonable limits of giving low powers of concave and convex glasses, with astigmatic correction, if they feel themselves competent to determine the amount, and will send all high degrees of these defects and all those exhibiting unusual conditions to those who are alone properly able to deal with them—to wit, the ophthalmic surgeons—and we sincerely trust that no rivalry in any way resembling that which appears to be in progress in America will take place in England.

ALTHOUGH it is too early yet to estimate the full extent of the outbreak of small-pox in Gloucester and its effect on the material prosperity of the city enough is already known to indicate that both directly and indirectly a heavy price is being paid for years of neglect of the primary safeguard against such visitations. Were it not so pitiful we might dwell upon the irony of fate which has brought into conjunction this scourge and the eve of the centenary of JENNER'S first vaccination and in a place so near to the scene of his patient and fruitful investigations. The latest returns gave a total of some 1600 cases of small-pox notified in the city during this epidemic, the height of which seems to have been reached in the middle of last month, when in one week there were no fewer than 211 cases notified. This for a city of about 40,000 inhabitants is sufficiently striking, whilst the weekly return of deaths shows that the mortality has been exceptionally high. Nor is it disputed that amongst the victims there have been a large number of children, which is in contrast with modern experience and doubtless recalls the incidence in times gone by when the child community had not received the protection afforded by JENNER'S discovery. The energetic measures that are now being taken to reach the children who are still unvaccinated, although late, may lessen the extent of the plague, whilst the natural decline of the disease as summer advances must raise hopes that the city may be free from it before the autumn comes round.

Small-pox has prevailed in England for the past five or six years, and Gloucester, like many other towns, has not been free from sporadic cases introduced by the tramp class — those nomadic distributers of contagion. But Gloucester, like some other places, had a weak place in its armour. So long as cases were few and scattered the measures of isolation &c. adopted by the sanitary authority could limit the spread of infection within the city; and the comparatively mild experience of Leicester two years ago may have encouraged the opponents of vaccination in Gloucester in the belief that they were equally secure. They have had a rude awakening from this dream, and some day—no matter how vigilant they may be—Leicester and other unvaccinated communities will receive the same lesson. For it has been demonstrated in Gloucester that, if the first line of defence against small-pox be abandoned, the provision of hospital isolation and the means for supervision of infected households must be on a scale far more extensive than is requisite in towns where the children are protected by vaccination. It is said that the rapid extension of the disease in the month of February was due to school infection; but so rapid was it and so widely diffused that the ordinary measures for coping with epidemic disease failed to have any influence in checking it. We may dismiss as ridiculous the argument that the disease has been fostered by defective drainage. It has been shown by the medical officer of health that the southern part of the city, in which it has mostly been prevalent, is the least crowded and the healthiest district, being free from diseases attributable to such defects. There is, however, a source of further infection in the hospital which has been rapidly extended to meet with the requirements. It is futile to carry out isolation if thereby a fresh focus of infection is established, and we trust, for the sake of the city, that the sanitary authorities will seriously consider the propriety of retaining these buildings. There has been no lack of earnest endeavour to do all that is possible to provide the means for isolation, and it seems particularly ungracious to criticise these well-meaning efforts; yet there is so much evidence in favour of the view that small-pox hospitals may *per se* disseminate contagion that it is impossible not to regard with some anxiety the retention of buildings for that purpose within a few hundred yards of inhabited dwellings.

The lesson which Gloucester has learnt may, we trust, be impressed on other towns. Small-pox can be controlled by efficient vaccination and revaccination, but if these precautions are disregarded there should be provided such machinery and such an amount of isolation accommodation to meet emergency which may at any time arise as would in themselves constitute a heavy standing tax upon the community. But wherever the second alternative is adopted as the sole method of coping with small-pox, it will have to be done with the full knowledge that the cost will not be one of money alone but will include the inevitable sacrifice of many of those who have not been afforded the personal protection that vaccination gives.

Annotations.

"Ne quid nimis."

THE APPEAL OF THE APOTHECARIES' HALL OF IRELAND TO THE PRIVY COUNCIL.

THE hearing of this case by the Privy Council—that is, the matter of an application by the Apothecaries' Hall of Ireland for the appointment of examiners to assist at the qualifying examinations which are held by the said Hall, which application has been refused by the General Medical Council—is fixed for Monday, May 11th, at eleven o'clock, in the Council Chamber, Whitehall. As the first instance of an appeal from the judgment of the General Medical Council to the Privy Council it cannot fail to be interesting, apart from the importance of the continuance or otherwise of the Apothecaries' Hall in the medical economy of Ireland. The proceedings will, of course, be open to the public and the Press.

KISSING THE BOOK.

As long ago as November last reference was made in our columns to a scene at a Sussex police-court, Petworth, between the Rev. Rowley Lascelles, rector of Graffham, and

the chairman of the bench of magistrates because the former declined to take the oath in the customary unclean fashion. Mr. Lascelles was in the witness-box at a neighbouring police-court, that of Midhurst, last week, and it is to be regretted that the chairman of the bench thought fit to make similar and unjustifiable comment upon Mr. Lascelles' refusal to be sworn except in the Scottish fashion. The magistrate's clerk observed, "But you are a clergyman of the Church of England?" to which the witness very properly replied, "I refuse to answer any such question and claim to be sworn in the Scotch fashion." The chairman then said, "Are you not an Englishman?" a question which also was rightly disregarded. This sort of thing is of no importance in the case of a gentleman who is strong and sensible enough to form his own opinion and to stand by it despite official sarcasm, but it is not right that an ignorant or ill-informed person should run the risk of a bullying at the hands of those whose duty it is to administer justice in the exercise of his undoubted and unquestionable prerogative.

TOURISTS AND IMPURE WATER.

THERE is not a more important question affecting the well-being of the tourist than that of the water supplied to him. The quality of the water at places visited by tourists, holiday-makers, and others is so frequently an object of suspicion as to lead them to avoid it altogether for drinking purposes. It is to be feared that the doubts thus often entertained as to the fitness of the water-supply at many hotels and health resorts, and especially abroad, are not without a reasonable foundation. It is well known that illness amongst travellers is very often directly traceable to a bad water-supply. We do not refer to cases where typhoid fever or cholera has been the result, although, of course, their occurrence from this cause is well known, but to certain minor complaints, such as sore-throat, boils, &c., where the water is probably also the *fons et origo mali*. There is no doubt, further, that a mere change in the quality and composition of the water consumed has an important influence, it may be favourable or unfavourable, upon the health. The question then arises, What shall the tourist or the individual seeking health and change of environment drink? He has been recommended on good grounds not to drink a strange water unless it has been boiled as in the preparation of tea and coffee. But these are not substitutes for the plain and pure water which he requires. The use of filters cannot be recommended unless their working is carefully managed and supervised by a trustworthy person, since with many kinds of filters it has been shown that this precaution has resulted in something worse than if it had not been applied. We think in this connexion that the germicidal effect of carbonic acid gas dissolved under pressure in water has been to a large extent overlooked. Mr. Hankin showed some two years ago that the carbonic acid gas in aerated water acts as a poison to the microbes, so that a bottle of aerated water which was teeming with bacteria when first made is generally perfectly free from active bacteria at the end of a week. The aerated water experimented with was bottled in India under a much higher pressure and temperature than is the case in England, and it is considered probable that in the Indian aerated water these conditions greatly aid the action of the gas. The results appear to lead to the conclusion that the virulence of the cholera, typhoid fever, and other microbes is thus destroyed and the risk of infection from carbonated water can be avoided if it is kept a week or more before use. These observations suggest that a carbonated *natural* mineral water is quite safe and trustworthy for drinking purposes, since previously to coming to the surface it is under an extremely high pressure of carbonic acid gas, to which pressure, furthermore, it has been subjected for a very long time. These are precisely the conditions, according to the researches alluded to, under which bacteria would be destroyed, and this effect may in some measure account for the advantages which a natural mineral water possesses over artificially aerated waters. Another important point connected with the safety of natural aerated waters for drinking purposes is that as a rule before being bottled the water is allowed to stand so that the iron may be oxidised and allowed to settle. This process not only makes the water clear and bright, but has an important purifying influence upon the water both in regard to organic and organised matters. There is no lack of supply of natural aerated waters on the Continent, where, also, they are comparatively cheap; and it would seem, therefore, that if these views be correct the visitor could confidently employ them for drinking purposes. At places of health resort at home, also, should any doubt be entertained on the same score, natural aerated water, it is reasonable to conclude, may be used with the same confidence. The subject is well worth attention in view of the approaching holiday season.

"PYGMY RACES OF MEN."

PROFESSOR FREDERICK STARR'S article on "Pygmy Races of Men" in the *North American Review* contains much interesting information regarding a curious and fascinating subject. The existence of pygmies has been known from the earliest times, and allusions to them are found in the writings of Homer, Herodotus, Aristotle, and Pliny. Although many of these allusions contain a fabulous element and are destitute of any scientific accuracy they at least represent a widespread belief which probably had some basis of fact as its foundation. In view of recent discoveries it is interesting to find that one of the most detailed and precise accounts of the ancient pygmies locates them in the deserts of Libya. De Quatrefages, quoted by Professor Starr, asserts that "the ancients had information more or less inexact, more or less incomplete, but also more or less true, concerning five populations of little stature, from whom they made their pygmies. Two were situated in Asia; the third toward the sources of the Nile; the fourth toward the East, but not far from the preceding; the fifth still in Africa, but entirely in the south-west." Modern travellers have confirmed these accounts, which have often been received with much incredulity. Schweinfurth found the diminutive Akkas at the court of Munza, King of the Monbuttu. Du Chaillu found the little Obongos in the Ashango country. Finally, Stanley put an end to all doubts on the subject and established beyond cavil the existence of various pygmy races in the interior of the African continent. The best known of the African pygmies are the Akkas, who are thus described by Stuhlmann writing so recently as 1893. He described them as "averaging 1·25 metres in stature, with light brown skin tinged with reddish-yellow. They have a round head, flat nose, prognathic face, and woolly brown hair. The beard is scanty, but a growth of light down-like hairs covers the whole body. They are characterised by a penetrating and disagreeable odour. In character they are cunning and cruel, with thievish propensities and many childish traits. They live in slight temporary shelters and dress scantily in leaves. They have no characteristic tattooing and no ornaments, but sometimes bore the upper lip. They are hunters and use the bow and poisoned arrows. Though sometimes cannibals, they are so but to a moderate degree." These pygmy tribes are generally found in isolated groups surrounded by populations of different ethnic origin and of normal stature. As might have been conjectured the pygmies usually occupy the less

favoured districts. They are by no means confined to Africa, but are found in India, the Malacca peninsula, Annam, New Guinea, the Andaman Islands, and Japan. With some divergencies of type, they usually present four leading characteristics—viz., small stature, dark skin, woolly hair, and short, round skulls. The Mincopies, or pygmies of the Andaman Islands, represent a well-marked type. They are even shorter in stature than the Akkas. The head is very large, the body well formed and developed, the hands and feet small and delicate, the skin black, and the hair black and woolly. They are active and vigorous, but short-lived. Quite recently the existence of a race of dwarfs in the Atlas Mountains of Southern Morocco has been demonstrated. They are reported to be about four feet high, with a "mahogany" complexion and short woolly hair. They are active and brave, skilled at single-stick and in hunting ostriches, and have some knowledge of tinkering and cobbling. They live on milk and camel-flesh. Remains of pygmy races in Europe have been found in the Crimea, Kazan, Astrakhan, Sicily, Sardinia, near Naples, and elsewhere. Sergi, the Roman anthropologist, finds evidence of a pygmy population at present existing in Russia and Italy. His theory is that there was an early migration of pygmies from Africa northward into the Mediterranean islands, Italy, and Eastern Europe. The Nanos of the Pyrenees are only about four feet high. They have a red complexion, red hair, a round face which is as wide as it is long, prominent cheek bones, a flat nose, and eyes like those of a Chinaman. Opinions differ as to whether these Nanos are simply cretins or the last remnants of a vanishing race. Traces of pygmy races are not wanting on the American continent. The remains of ruined buildings in Yucatan and Central America are suggestive of pygmy origin. "Various writers have commented upon little Mexicans. In 1882 a band of little people invaded British Honduras. They were from four feet to four feet six inches in stature, and are said to be warlike, to make human sacrifices, to use the blow-gun and poisoned arrows, and to be makers of Panama hats." It is evident that the existence of pygmy races has passed out of the region of myth and fable into that of history and science. Our information regarding these strange races is still incomplete and inexact, but it is being steadily augmented and brought into line with accepted results in biology and anthropology. The facts already educed suggest many interesting reflections, but perhaps raise more problems than they solve. It seems clearly impossible to regard the pygmy races as owning a common origin, although their tendency to conform to a single fairly well-defined type is very curious. Is their case one of degeneration owing to some special circumstances of climate and environment, or do they represent a remnant still remaining in a stage of development long since left behind by the rest of the human species? We cannot say with certainty, but such questions may yet become capable of solution when our information on the subject has become more extensive and exact.

THE PLAGUE AT HONG-KONG.

IT is evident that the inability of the Hong-Kong sanitary authorities to eradicate the bubonic plague with which the colony has so long been afflicted must in some measure, at all events, be due to the numerous body of irregular practitioners, chiefly Chinese, who through ignorance or carelessness fail to report the cases of the disease that they are called in to attend. Any persons who choose to do so are apparently at liberty to practice medicine on the island, the law under ordinary circumstances being powerless to interfere; but good sometimes springs out of evil, and, as will be seen by the following extract from the *Hong-Kong Daily Press* of March 4th last, the existing epidemic has led to the infliction of well-merited (if inadequate) punishment upon one member of the unqualified fraternity. "A Chinese doctor named Wong San Chan, of 307, Queen's Road West, was charged at the Police-court yesterday with failing to report a case of plague. The defendant attended the patient, Ng Oi, on the first-floor of 14, Pokfulam-road, and when death from plague took place the doctor failed to report it. Dr. Atkinson, who examined the body, said there was a swelling in the deceased's neck. The defendant said he did not know the law, and further excused himself by saying that his patient suffered from fever and he did not see a swelling in the neck. The magistrate, Mr. T. Sercombe Smith, fined the defendant 25 dols. or a month's imprisonment." It is possible that with skilled medical assistance the hapless Ng Oi might have survived and be still in the enjoyment of his first-floor in Pokfulam-road, but manifestly the presumable Chinaman with a name like a chemical symbol never had the chance, for the nature of his disease was not even recognised by the ignoramus Wong San Chan.

"X" RAYS AS A DEPILATORY.

ALL sorts of physiological effects produced by "x" rays have been recorded since the Roentgen boom, but the announcement that they are likely to cause baldness is calculated to spread dismay amongst those who have been experimenting closely with the Crookes's tube. In a preliminary experiment to ascertain the possibility of photographing a bullet in the head of a child it was found that twenty-one days after the experiment all the hair came out in the region exposed to the "x" ray discharge. If the time that elapses before positive baldness was effected could be reduced what an incalculable benefit would Roentgen's discovery confer on shavers. Thus to remove the beard would only require the placing of a Crookes's tube for a few minutes over the chin before retiring to rest, when next morning the ordinary application of soap and water would complete the operation! Under these circumstances the "new barber" may not impossibly be one of the many outcomes of the "new photography."

"PSEUDO-GENERAL PARALYSIS."

IN a recent number of the *Journal of Mental Science* is reprinted an address on this subject delivered by Dr. Theo. B. Hyslop at the February meeting in Cambridge of the Medico-Psychological Association. Dr. Hyslop begins by disarming any criticism which might be offered with regard to the expression "pseudo-general paralysis." He explains that the term "general paralysis" as used at present tends to cover many cases which are not truly general paralyses, but really are cases of insanity associated with a form of paralysis which, strictly speaking, is only partial. Dr. Hyslop next considers the twofold meaning of the term "general paralysis" in extension and intention, and points out the limitations enforced upon it by the addition of the words "of the insane." The only exemplification, he remarks, is in the stage immediately preceding dissolution, and this he regards as the explanation of the wonderful truism that general paralysis is invariably fatal. But he proceeds: "As it at present stands, general paralysis would appear to be best defined as a progressive disease which begins anyhow but ends somehow." The different definitions of general paralysis are next considered and their insufficiency pointed out. He regards general paralysis as a disease in which there is progressive paralysis of all mental and physical functions terminating in complete dementia on the one hand and complete paralysis on the other. Strictly speaking, it is pointed out that th

only condition answering to such a definition is death. He next explains that by the term "pseudo-general paralysis" he means to denote no particular disease, but to imply that there are certain forms of paralysis which are like general paralysis and which have been mistaken for it, but which in reality are partial paralyses, mainly cerebral with associated mental degenerations. The different forms of this pseudo-general paralysis are next alluded to. Thus alcoholic general paralysis from the symptomatic point of view is almost identical, or may be so, with true general paralysis, but the bodily and mental symptoms gradually disappear. The attacks may be repeated and ultimately such patients become alcoholic dements. Lead intoxication also gives rise to one of these pseudo forms. The chief difference is in regard to course and prognosis. The affection is an essentially curable one and has a tendency to recur under the influence of suitable conditions. Febrile diseases, such as typhoid fever &c., are occasionally followed by a condition simulating general paralysis, and so also is malaria, but in such cases the course of the disease is widely different from that in true general paralysis, and the pathology is consequently distinct. The relation of syphilis to general paralysis and the occurrence of a pseudo-general paralysis in connexion with syphilis are next alluded to and the difficulties surrounding the determination of this are fully recognised. Sunstroke he does not think an actual cause of general paralysis, but he thinks the sequelæ of sunstroke are not uncommonly mistaken for the symptoms of general paralysis. In conclusion, Dr. Hyslop submitted to the meeting two points for consideration: (1) whether the term "general paralysis" is entirely satisfactory and not merely convenient, and whether it is desirable to substitute another—e.g., progressive paralytic dementia; and (2) whether by viewing general paralysis as an entity we should be able better to avoid the danger of false prediction as to the course of the disease. The whole paper is a very interesting contribution towards the elucidation of many difficult points, and it brings out clearly the need that there is for the careful consideration of each case of supposed general paralysis on its own merits, and especially as regards antecedent conditions which may have causal connexion with the onset.

MR. REGINALD ACLAND ON THE HOSPITAL SATURDAY FUND.

THE recent address of Mr. Acland, as the chairman of this Fund, is worthy of the attention of all who are interested in the relation of the working classes to the medical profession on the one hand and to the great medical charities on the other. It is a courageous deliverance for one in Mr. Acland's official relation to the Hospital Saturday Fund. It does not hide the weak points in the administration of the Fund. It discloses faithfully a want of fervour in the council and even in the executive committee. The street collection—which we have always regarded as rather a waste of strength and which was smaller last year by £160 than the year before—Mr. Acland would give up entirely and would devote more effort to a whole-hearted attempt to place the workshop collection on a wider and more effective basis by securing, for this end, the coöperation of local committees. This collection showed last year an increase of £748. It is undoubtedly the feature of the Hospital Saturday Fund by which, as we have always maintained, it will be judged. But it is as yet far from satisfactory. The position of the working classes is improving much, and their wages more. Nobody will say that the sum of £18,000 from the workshops of London represents either the means or the obligations of the working classes to the hospitals of London, in which the highest skill and the best nursing are placed at their disposal. Mr. Acland will do well to continue, in the spirit of his able address, to urge his colleagues to assist in the development of this feature of the Fund. His remarks on the different principles on which the Hospital Sunday Fund and the Hospital Saturday Fund are distributed are worthy of consideration. We hail with pleasure the expression of his readiness as regards the Hospital Saturday Fund "to cease giving any marks at all for the attendance of Out-patients because of the enormous increase which is continually taking place in these attendances"; this increase he seeks to abate. With that object the Hospital Saturday Fund has given a fixed grant for the power of recommending patients for immediate treatment at the branches of the Metropolitan Provident Dispensary Association. We have not space to deal further with the various questions boldly dealt with by Mr. Acland. But we congratulate the Fund on having a chairman so faithful and so sound in his views of the proper functions of hospitals and dispensaries.

INFANT LIFE PROTECTION.

AT a recent meeting of the Select Committee upon the Infant Life Protection Bill Mr. A. Braxton Hicks gave important evidence. He said it was extremely difficult to prove criminal intent in connexion with deaths of nurse children, that bottle-fed children were more difficult to rear, and that foster-mothers required more supervision. In our columns for May 2nd we quoted a particularly horrible case of cruelty, and now another comes from Plymouth. A married woman who looked after three children in addition to her own was convicted of gross cruelty to two of them and sentenced to six months' hard labour. The magistrates *regretted they had not the power to order defendant to receive twenty-five lashes.* This is really excellent. We only wish the Legislature would pass a short flogging bill making it legal to flog those guilty of brutal assaults or wanton cruelty upon the bodies of (*a*) persons and (*b*) animals. Pain is the only method of appealing to some natures. Roughs of all classes and those who tear out horses' tongues, &c., would possibly think twice about their little games if they knew "the cat" would follow. But, alas! flogging is dying out, even at public schools.

LANDRY'S PARALYSIS.

IN the *American Journal of the Medical Sciences* for April Dr. Diller and Dr. Adolph Meyer relate a case which, if incomplete in some respects, is of considerable interest as furnishing an example of an obscure and not very usual condition. The patient was a married woman aged fifty-three years who was admitted to hospital on account of loss of power in the legs which had come on suddenly about ten days previously. The loss of power was not absolute, but gradually became more marked, and a week after admission she began to lose power in the arms as well, and the control of the sphincters of the bladder and rectum became impaired. By-and-bye bulbar symptoms were superadded—difficulty in phonation and deglutition—so that she had to be fed with the stomach-tube, and she died from respiratory failure about three months after the onset of the first symptoms. The psychical condition remained unimpaired until just towards the end; there was no impairment of sensation in any way, both knee-jerks were lost, and there was swelling of both knees and pain was caused in carrying out passive movements at these joints. There were no muscular wastings, no changes in electrical reaction, no fever or pain more than that mentioned in connexion with movements at the knee-joints, and no tendency to trophic disturbance. The case in its clinical features, as the writers point out, differs only from the classical picture of Landry's paralysis in the affection of the sphincters and the somewhat prolonged

course of the malady. Only the spinal cord and nerve roots were examined microscopically. In the grey matter the anterior horn cells appeared normal except that they were deeply pigmented. The white matter was changed in the crossed pyramidal tracts throughout the cord, the medullated fibres in these tracts being lessened in number and the neuroglia increased, and in one part of the dorsal region the posterior columns were similarly affected. Unfortunately the peripheral nerves were not available for examination, so that the morbid anatomy of the case remains in great part uncertain. At the conclusion of the recital of their interesting case the writers give a *résumé* of the different conditions, clinical and anatomical, which have been recognised as constituting "Landry's paralysis," and from a consideration of these they feel justified in including their case in that group.

UNIVERSITY COLLEGE HOSPITAL.

A FESTIVAL dinner in aid of University College Hospital was held in the King's Hall at the Holborn Restaurant, London, on Wednesday, May 6th, when His Royal Highness the Duke of Cambridge, K.G., presided. Replying to the toast of "The Houses of Parliament," Lord Reay took occasion to point out the advantages which would accrue to the nation if the medical profession were represented in the Upper Chamber. The toast of the evening was proposed by the Duke of Cambridge. He called attention to the alarming decrease in the income of the hospital. Whereas in 1894 the subscriptions received amounted to £2007, last year they only reached the sum of £1978, and the same decrease was noticeable in both donations and legacies. It may be, as the Duke said, that there is a tendency on the part of the benevolent to run after new institutions and leave the old ones to take care of themselves. New institutions are necessary with a growing population, but old ones, especially those which can show a record like University College Hospital, should not be neglected. At the close of last year the debt reached a total of £14,765, an increase of nearly £3000 upon the previous year. It is gratifying to note that donations amounting to £1444 were announced by Mr. Newton H. Nixon, the secretary, but a great deal more is wanted if the institution is still to carry on its beneficent work untrammelled by debt.

DEATHS UNDER ANÆSTHETICS.

A DEATH under chloroform occurred on Feb. 26th in the Royal Infirmary, Bristol. We are indebted for full notes to Mr. Maurice Barber, junior house surgeon. The patient, a lad aged fourteen, suffered from recurrent appendicitis, for which an operation was to be performed under chloroform. The patient had taken chloroform successfully in November, 1895, and on the present occasion was carefully examined before the anæsthetic was administered. About twelve minutes after the commencement of the administration and five minutes after the operation had been in progress the boy became pale. The pupils were contracted and reacted to light. Chloroform was stopped and a few minutes later the patient became blanched, the pupils dilated, while respiration grew shallow. No pulse could be felt in the facial artery. The head was drawn over the end of the table and artificial respiration and other measures for resuscitation were practised. The patient breathed at intervals for ten minutes. After this respiration almost ceased, although occasional inspiratory gasps occurred for fifteen minutes longer. Artificial respiration was kept up for over an hour. No heart sounds were to be detected. After the first partial dilatation of the pupils a semi-contraction occurred, the pupils being of unequal size, but this was followed by medium dilatation. Besides artificial respiration inversion and electrical stimulation of the heart were practised. Ether and strychnine were injected hypodermically. Chloroform was given by a medical man who has an experience of 700 cases. A Skinner's frame was used and from two and a half to three drachms were administered. The mask was held one inch and a half from the face. The necropsy showed dilatation of the right ventricle with thinning of the walls; the lungs were markedly emphysematous; and tuberculous deposits were found upon the abdominal viscera. The operation—an abdominal section—was commenced but not completed, but there does not appear to have been any unusual amount of shock attendant upon its performance.—The death of a patient under chloroform is also reported from the Cumberland Infirmary, Carlisle. The patient, a lad aged eighteen, was kicked in the thigh in February and an operation was performed under chloroform. Subsequently in April, as a further surgical proceeding was necessary, chloroform was again administered. A thorough examination of the patient was made on each occasion and no organic visceral disease was detected. When the operation was practically over the patient suddenly became very pale and died. This was twenty minutes after the first chloroform was inhaled. The account furnished to us by the house surgeon does not help to explain the sad occurrence. The death appears to have been caused by the chloroform and to have been due to syncope.—We have been favoured by Dr. Smart with careful notes of a death under chloroform which recently took place at the workhouse hospital, Toxteth. The patient, a dock labourer aged thirty-two, was upon admission much collapsed and had been suffering from intestinal obstruction for ten days. The pulse was irregular. He was admitted into the wards, and when operation was decided upon chloroform was given, although it was intended to maintain the anæsthesia when once obtained by ether. Chloroform to the extent of a drachm was given when violent struggling took place. The man suddenly sat up and then fell back dead. The necropsy showed the heart to be somewhat dilated. This case again shows the great danger to the patient of struggling. The muscular tension not only mechanically interferes with the circulation and unduly taxes the heart, but fixes the thorax and either renders respiration impossible or sorely hampers it. The quantity of chloroform given was extremely small.

SALE OF BAD MEAT.

WE have again this week to comment upon more cases of this description in which convictions have been obtained and fines inflicted. Two charges were brought against a butcher of Birmingham, one for having on his premises three carcases of veal which were unfit for food and another for having bad meat hanging in his shop. The carcases of veal were said to be black and yellow in colour and covered with slime, while the meat taken from the shop was decomposed and gave off a very bad smell. The defendant was fined £20 and costs in each case, with the alternative of two months' imprisonment. Another case, also at Birmingham, occurred, where meat which was green from mould was found hanging with healthy meat, presumably for the purpose of selling the good and the bad together. Here the defendant protested that he had not put the bad meat under the counter because of the rats which pulled it about, but the magistrates failing to see the matter in the same light, imposed a fine of £10 and costs. A third case occurred at Clerkenwell, where a dealer was fined £20 for depositing at the premises of a salesman the body of a heifer which showed traces of having suffered from pleuro-pneumonia. It is to be hoped that a series of heavy punishments will in some measure stop the sale of putrid meat, which is apparently an evil that is growing in extent and no doubt affords a substantial profit to the vendors. It is not only a business fraud in the sense that a damaged article is sold for a good one, but bad meat is liable to produce serious illnesses in those who are unfortunate enough to eat it. In the best interests of public health the most stringent means

should be used to keep such practices down. In connexion with this subject Dr. Sedgwick Saunders, the medical officer of health for the City of London, states that in 1882 the total meat supply to the Central Markets alone was 211,461 tons, whereas in 1895 it was 347,283 tons, an increase of 64 per cent. In 1882 there were 175 tons condemned, and in 1895 no fewer than 599 tons, an increase of 242 per cent., while in the first three months of this year 127 tons were seized. The inspection of the huge quantities of meat sold is far too much for the powers of the present number of inspectors, with the result that the poor are often imposed upon by the sale of inferior and unsound meat. On the recommendation of the medical officer of health the Commissioners of Sewers have determined to increase the staff of meat inspectors to six, the new officials commencing at a salary of £200 a year each.

THE LONDON AND COUNTIES MEDICAL PROTECTION SOCIETY.

WE have already given an abstract of the annual report of this useful society[1] which was read at the annual meeting on May 1st, and on which the society may be congratulated. After this meeting the annual dinner of the society was held. Mr. Hutchinson, president of the society, was in the chair and was supported by various visitors, including Mr. Warburton, the counsel of the society. The dinner was the more interesting by reason of the presence of ladies. Mr. Hutchinson, in proposing "Prosperity to the Society," dwelt with feeling on the efforts of the society to bring about an honourable amalgamation, so much to be desired, with the sister society. Dr. Glover and Mr. Warburton returned thanks for the visitors. Pleasant music was discoursed and all present seemed to enjoy the entertainment. The toast of the chairman's health was proposed by Dr. Paramore and seconded by Dr. Heron.

SERUM TREATMENT OF DIPHTHERIA IN CRACOW.

DR. STAPA has presented to the Cracow Medical Society a report of the results obtained by the serum treatment of diphtheria in the Children's Hospital of that city. During the year 1895 the number of children subjected to it was 258. Of these the mortality was 22 per cent. This compares very favourably with the mortality in the ten previous years, which was as high as 56·3 per cent., there being 709 deaths out of a total of 1354 patients who were treated by other methods. Various serums were employed—Behring's, Roux's, Aronson's, Buivid's, and Paltauf's. Laryngeal croup occurred in 165 cases, and a rash having the appearance of scarlet fever and lasting from two to sixteen days in fifty-eight cases. It was noticed that certain samples of serum always produced rash. No effect on the occurrence of albuminuria by the serum could be shown. There were seven cases of return of the disease after from ten to twenty days and three cases in which it returned after an interval of from two to three months.

THE DOOM OF THE SILKWORM AND THE HORSE.

WE know that that useful beast of burden and of draught—the horse—is threatened with expulsion from our highways by the introduction of auto-cars, and now it would seem that the silkworm will soon be dispensed with as a source of silk. We wonder what law of evolution it is which just now appears to be bringing about these drastic changes and threatens to lead to the extinction of two most useful members of the animal kingdom. Silk in future is to be made from wood, and thereby a new British industry is to be installed in Lancashire which is calculated in a measure to add to the commercial prosperity of that district which has been so much menaced of late. It appears from an account contained in the *Times* of May 2nd that the process consists in nitrating wood pulp and afterwards submitting it to pneumatic pressure so that ultimately filaments are obtained of which no fewer than ten are required to make up the thickness of a single human hair. The small orifices through which the liquid matter is forced are known as "glass silkworms." After it is drawn out into filaments and passed through a process of weaving the artificial silk is denitrified and it is then rolled to produce lustre. The invention cannot fail to have an important bearing on modern life and custom, and it may not be without some influence in deciding the momentous question which was seriously discussed in our columns some years ago as to the desirability and rationality of the medical man continuing to wear a tall silk hat.

[1] THE LANCET, May 2nd, 1896.

A TERRIBLE COLLIERY DISASTER.

"OVER sixty coffins have been ordered by the colliery company" is the gruesome announcement made in an account of the colliery explosion near Leeds in the daily papers of Monday last week, and probably the actual number of lives lost was more than sixty. The harrowing details of the disaster need not here be recounted—suffice it to add that the explosion appears to have been one of terrific and exceptional force. Yet we learn that the mine was considered so safe that it was worked with naked lights and that gas was practically unknown in the workings. The cause of the explosion is, therefore, surrounded with considerable mystery. We do not know, however, and we can gather no information as to whether the mine was dry and dusty, and if so whether the precaution of damping was taken. Then, again, there is no evidence as to whether some high explosive or gunpowder was in use for shot-firing purposes. Evidence on this latter point is of special importance since the use of high explosives in the place of gunpowder greatly limits the risk of explosion in dry, dusty, and fiery mines. We trust that the colliery owners will be able to satisfy the Home Office on each and all of these points. It is a significant fact that on the very day of the disastrous explosion a colliery warning was issued directing the attention of miners to the change which had taken place in the atmospheric conditions over the British coal fields and "during Wednesday night an anti-cyclone of considerable size and intensity began to affect the coal country, the barometer rising more or less decidedly everywhere." Is any heed paid to these colliery warnings?

LONDON POST-GRADUATE COURSE.

THE opportunities afforded by the London Post-graduate Course have been, as our readers know, largely used by members of the profession desirous of acquiring a practical knowledge of the more recent advances in medical science, and the programme now unfolded for the coming season promises well. Instruction will be given at the following hospitals and institutions:—The Royal London Ophthalmic Hospital, Moorfields (diseases of the eye); the Hospital for Diseases of the Skin, Blackfriars (skin diseases); Bethlem Royal Hospital for Lunatics (mental diseases); the London Throat Hospital, Great Portland-street (diseases of the throat, nose, and ear); the Bacteriological Laboratory, King's College (pathogenic organisms); the Central London Sick Asylum, Cleveland-street (clinical lectures); the Parkes Museum, Margaret-street (lectures and demonstrations in hygiene); and the British Institute of Preventive Medicine, Great Russell-street (chemistry and bacteriology of urine). The teaching will be, as far as possible, of a practical character, including demonstrations of selected cases and lectures on

the diagnosis and treatment of disease. There will also be instruction in the use of the microscope, ophthalmoscope, laryngoscope, and aural and nasal specula. The hours of attendance are all in the afternoon, at various times, from one o'clock to eight. The summer term extends from May 4th to June 29th, and the winter term from Oct. 5th to Nov. 27th. The fees for attendance at any single course are £1 1s., £2 2s., or £3 3s., according to the number of lectures and demonstrations. Inquiries and applications for cards of admission should be addressed to the secretary, Dr. J. Fletcher Little, 32, Harley-street, W.

MEDICAL CERTIFICATES AND THE LONDON SCHOOL BOARD.

ON Wednesday last Dr. Glover, Dr. Bridgwater, and Dr. Colcott Fox had an interview of some length with the Attendance Committee of the London School Board with a view to the removal of the friction which unhappily prevails between the profession and the Board in reference to medical certificates. The deputation was most courteously received by the members of the committee, who showed a desire to meet as far as possible the wishes of the profession. They will announce in a few days how far they can do so.

THE May dinner and annual meeting of the Aberdeen University Club (London) will be held at the Holborn Restaurant on Wednesday, May 20th, at 7 P.M. Dr. Nicolson, one of the Lord Chancellor's Visitors in Lunacy and late Superintendent of Broadmoor Asylum, will take the chair, and we are certain will adequately discharge the duties. It is hoped that he will be supported by a large gathering. Members wishing to attend are requested to communicate with the hon. secretaries, Mr. J. Gerald Laing, 2, Brick-court, Temple; and Dr. James Galloway, 21, Queen Anne-street, W.

AMONG the fifteen candidates whose names are announced as having been selected by the Council of the Royal Society for recommendation for election into the society are two members of the medical profession—Dr. F. W. Mott, Assistant Physician to Charing-cross Hospital, and Mr. Charles Stewart, Professor of Comparative Anatomy and Physiology and Conservator of the Museum of the Royal College of Surgeons of England.

A GENERAL monthly meeting of the members of the Royal Institution was held on the 4th inst., Sir James Crichton Browne, M.D., F.R.S., Treasurer and Vice-President, presiding. The following medical men were elected members:—Mr. J. H. Badcock, M.R.C.S. Eng., Dr. W. J. Gow, and Dr. Thomas Oliver, F.R.C.P. Lond.

DR. F. J. WALDO, medical officer of health to the Middle and Inner Temples, has been called to the Bar. On the same day Dr. William M. Leslie and Dr. Sidney R. Dyer were called to the Bar.

MR. A. A. KANTHACK, M.D. Lond., has been approved as Deputy for Dr. Roy, the Professor of Pathology in the University of Cambridge, for a period of three months at a stipend of £120.

WE understand that Sir William Roberts, M.D., F.R.S., has been appointed to succeed Dr. Wilks as representative of the University of London in the General Medical Council.

THE annual dinner of the West London Medico-Chirurgical Society will be held at the Café Monico, Piccadilly-circus, on Wednesday, May 20th, at 7.30 P.M.

Pressure on our space has compelled us to omit the usual weekly instalment of the biography of THOMAS WAKLEY, *the Founder of* THE LANCET.

THE NILE EXPEDITION.

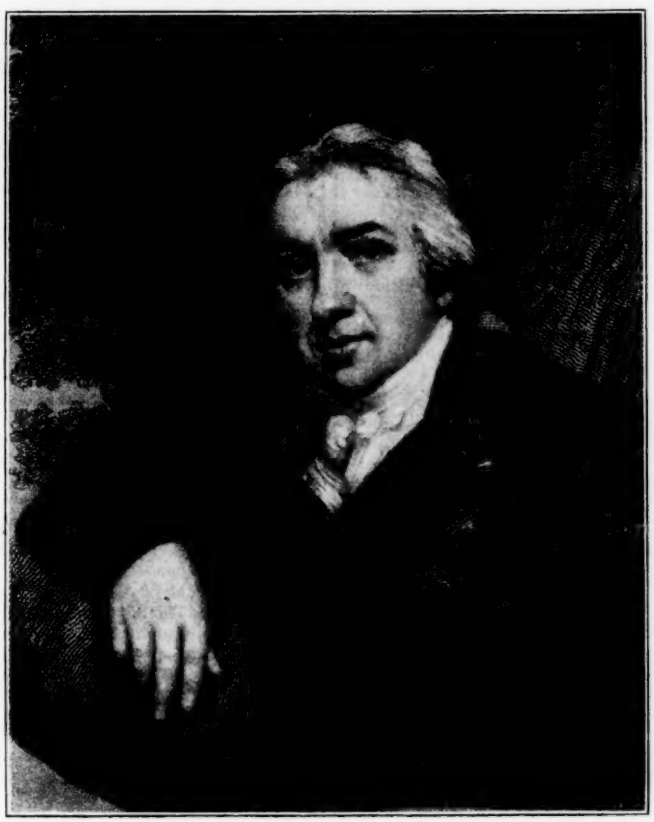
SINCE our last report intelligence has been received of a cavalry action at Akasheh—the first fight of the campaign. Some squadrons of Egyptian cavalry attacked, about four miles from Akasheh, a mixed force of Dervish horse and foot numbering altogether between 1200 and 1300. The Dervishes were completely defeated and made so hasty a retreat that the Soudanese infantry battalion supporting the Egyptian cavalry had not an opportunity of taking part in the encounter. The Egyptians behaved uncommonly well, having charged the Dervishes with pluck and determination, showing that their previous military preparation and training had not been thrown away and that under the leadership of English officers they were capable of giving a very different account of themselves to what they had done on most previous occasions. The heat during the action is described as having been terribly trying to the troops. The thermometer registered 116° F. in the shade, and in the open desert, owing to the radiation from the sand and rocks, it is stated that the temperature reached 150°. The special correspondent of the *Standard* gives some illustrations of the drying effects of the heat on all sorts of stores at Wady Halfa in causing their shrinkage, amounting in some cases to 20 per cent. Onions lost a thousand pounds out of five thousand; meat slaughtered at seven in the morning and packed in wet cloths lost 15 per cent. by seven the next morning and became unfit for food. The baking of bread is a great difficulty; native bakers have taken over this work for the troops in consequence of the men with the force being unable to stand it for more than a short time. Considering the intolerable heat the health of the expeditionary force and the energy and activity that are being displayed at all the stations on the Nile are remarkable.

There appears to be ample accommodation for the troops at Wady Halfa and elsewhere. Time is an essential element in making proper arrangements, and the comparative inactivity of the Dervishes up to the present has enabled the military authorities to make their preparations. The more rapid a campaign the greater is the strain, of course, upon all departments. According to all the reports that have been received in this country the amount of hospital accommodation provided for the troops is ample and the arrangements satisfactory. With the exceptional heat that prevails (tempered happily by a breeze as a rule), the sand-storms, the toughness of the meat, and the monotony of the diet, it is only to be expected that there will be a good deal of sickness. The heat at Wady Halfa is very great and is likely to continue to be so for some time. There has already been a death from heat apoplexy; still the troops are so far bearing the effects of the climate better than might have been anticipated. The excitement and novelty of the scene, the work in which they are engaged, and the success that has hitherto attended their labours have all tended to keep them in excellent spirits. The telegraph to Akasheh is completed and in operation, and the railway is progressing, but the work has proved rather more tardy and difficult than was anticipated. The Camel Corps is stated to be now amply provided with camels, and according to the latest accounts the wounded at the late fight are doing well. Every effort is being made, we are glad to say, by the erection of ice-making machinery to provide the troops with ice as far as possible.

LITERARY INTELLIGENCE.—A new work on Descriptive and Practical Histology has been written for the use of students by Mr. Arthur Clarkson, M.B. Edin., formerly demonstrator of physiology in Owens College, Manchester, and in the Yorkshire College, Leeds. The publishers will be Messrs. John Wright and Co., Bristol, and Messrs. Simpkin, Marshall, Hamilton, Kent, and Co., London. It will consist of about 600 pages with 174 coloured original illustrations, and will be divided into seventeen chapters in which the student will be taken tutorially over the various parts of the subject and instructed in the methods of preparation.

JENNER AND HIS WORK.

IN a recent *brochure* by a prominent anti-vaccinationist it is seriously suggested that one reason for giving up vaccination is that, as regards its prevalence, small-pox is now a very inconsiderable disease and contributes a mere fraction to the total death-rate of this country. In advancing this argument the anti-vaccinationist in a single sentence shows how illogical even a well-educated anti-vaccinationist can be, and at the same time in stating the fact on which the suggestion is based he pays an unwitting compliment to the author of vaccination. It is unquestionably true that small-pox in the end of the nineteenth century contrasted with small-pox as it was in Jenner's time has diminished from the proportions of a giant to those of a dwarf, and for this diminution it is not possible to find any explanation other than vaccination which will meet all the facts of the case. If it be suggested that the diminution in small-pox was owing to the cessation of the practice of variolous inoculation, the reply is not far to seek. It is not at all certain that artificial variolation did increase the total amount of "natural" small-pox in the country. It is possible indeed to argue for quite the opposite view, and many competent observers, who were well acquainted with the influence of small-pox inoculation both in large cities and in rural districts, had no doubt whatever, judging from their own knowledge of local facts, that the practice had greatly diminished the total mortality from the disease. In places, too, where variolation had never been more than an experiment but where small-pox largely prevailed the introduction of vaccination was followed by the same kind of diminution in small-pox that occurred in other places where the spread of vaccination was coincident with the shrinking of the older practice of variolation. If it be alleged that it is to sanitation and not to vaccination that we owe the fall in small-pox, the reply is manifold. Sanitation cannot account for the fact that whereas before the introduction of vaccination in a given community four children died of small-pox in the first half year of life for every one child that died of it in the second half year of life, but that when in this community vaccination was made compulsory at the age of six months the proportion of deaths in the second six months of life fell so amazingly that instead of being four times greater than for the first six months it became four times smaller. Sanitation cannot account for the fact that in the last century small-pox was a disease of childhood, but that when vaccination came into vogue the pestilence at once ceased to prevail among the vaccinated children, while later, after these children had become adults, it began to reassert some part of its sway among them. Sanitation cannot account for the fact that in places where there was no sanitation the introduction of vaccination was followed by the usual striking diminution in the prevalence of small-pox. Sanitation cannot account for the fact that in hospitals at a time when the only protection which nurses attending to sufferers from typhus fever had against typhus fever consisted in a previous attack of the disease, and when the only protection that probationers in typhus fever wards could hope for was a non-fatal attack of that fever—that at this time their sister nurses in the small-pox wards, living and breathing in an atmosphere saturated with the poison, remained free from attacks of small-pox, though, indeed, an attack of typhus fever was not unknown amongst them. Nor can sanitation account for the fact that among small-pox nurses of the present time the many who are revaccinated remain free from danger while the few who by some mischance escape revaccination are forthwith attacked by small-pox, nor for the fact that in the small-pox wards at Leicester, where anti-vaccination was so popular a cult that some half-dozen of the nursing staff refused revaccination, all but one of the half-dozen were attacked by small-pox and one had to pay the death penalty for her temerity; while of the sixteen or thereabouts who submitted to revaccination not one had also to submit to small-pox.



EDWARD JENNER, M.D., F.R.S.

(From a painting by J. R. Smith, R.A.)

It is in very truth to Jenner and to vaccination that the nineteenth century owes its freedom from small-pox. In the present day we can have little appreciation of the difficulties with which he had to contend before he could present to the world his new system of small-pox prevention. He was a busy practitioner in a wide rural district, subject to all the distractions of general practice and of social duties, and with his scanty leisure broken in upon and interfered

with by the sudden calls to which every country doctor is liable. He was quite unprovided with the laboratories and with all the apparatus that make exact research so possible and even so convenient in our own time. Even half a century later so able and persevering an observer as Robert Ceely, with the way already paved for him by Jenner and other less distinguished workers, found enormous difficulties in his researches, carried on amidst the filth and darkness of country cowhouses. For Jenner, however, there was little or no assistance to be obtained from anything that had gone before. Other practitioners besides himself had seen good reason to believe in the traditions of the dairies, but none of them had ever ventured seriously to grapple with the subject as one that could be made generally useful in the interests of mankind. In these days the term cow-pox was popularly used to mean anything and everything in the way of eruption, or excoriation, or abrasion, or fissure, that could attack the teats and udders of cows. Even after Jenner had satisfied himself that all cow eruptions were not cow-pox, and that it was cow-pox and cow-pox alone which had the peculiar anti-variolous power, and after he had published his "Inquiry," we find a veterinary surgeon, apparently of good standing, describing in print as cow-pox a teat affection which obviously was not cow-pox and which, correctly enough, the veterinary surgeon opined to have no power against small-pox. We have further to recollect that Jenner had, to begin with, no knowledge of the various operative details which we, in the present day, know to be absolutely essential to the proper carrying out of vaccination. From the cow's teats there was the greatest possible risk of taking along with the lymph of the cow-pox itself all manner of extraneous matter, the result of filth in the lairs, of dirt on the milker's hands, and of what Ceely long afterwards described as "the merciless manipulations of the milkers." So, too, he had to decide for himself whether matter either from the cow's teats or from the vesicles of a vaccinated arm should be used in the vesicular, or the pustular, or the ulcerative stage. Before him also there was the fact that his experiments had to be conducted not on the lower animals, but on human beings, and that the possibility of mishap made very weighty the responsibility of the operator. With such material as Jenner had to begin by using it is not surprising that at first he called the inflammation surrounding the vaccine vesicle "erysipelatous" rather than erythematous, and that he gave careful instructions as to the prevention and treatment of possible ulceration following local disease. His theory that cow-pox itself had its origin in an equine disease led to considerable doubt and difficulty among some of his *confrères*. Here, too, there was a popular and all-embracing name "horse-grease" to be contended with, and, as in the case of the bovine disease so with the equine, it was only one particular malady among several that went under the same name that had anything to do with cow-pox or small-pox. One result was that in London endeavours were made to produce cow-pox by inoculating material from some unhealthy or erysipalatous condition of the heels of a horse and that the failure of these attempts led to doubt as to the very genesis of the Jennerian system. Two or three years later, however, Loy of Whitby published his observations, which went to show that Jenner's fault was rather in the use of the name than in the reality and in the supposition that horse-pox was necessarily the parent of cow-pox rather than merely a parallel or analogous disease. It is not easy in these days to realise the fact that when vaccination began to be practised in London any weight could be attached to the opinion of John Birch of St. Thomas's Hospital who held that "small-pox was a merciful provision on the part of Providence to lessen the burthen of a poor man's family," or of Dr. Rowley who declared that "the small-pox is a visitation from God; but the cow-pox is produced by presumptuous man: the former was what heaven ordained, the latter is perhaps a daring violation of our holy religion." Nor can we read without a smile the record of that famous consultation between Rowley and Moseley, regarding which Rowley reports: "Dr. Moseley ..... saw this case of the ox-faced boy by my desire. He observed to me that the boy's face seemed in a state of transforming and assuming the visage of a cow." Yet 100 years ago all these assaults on vaccination had their own weight. The proposal to introduce by way of inoculation into the human frame any matter from the body of a lower animal was entirely new. The cow-pox itself, moreover, especially in its differences from the yellow-pock and the blister-pock or white-pock and the other diseases with which it had been confused, was quite unknown to the profession at large. Jenner's "golden rule," so early and so clearly formulated by himself and so important for safe and successful vaccination, to take matter from a vesicle only when it is clear and limpid before it has reached the pustular stage and before the surrounding areola has begun to appear, was openly scouted by at least one of the principal vaccinators in London. Through all these difficulties and through many others which it would take too long to detail here Jenner had to fight his way. Sometimes he was inclined to despair, but his absolute certainty and knowledge of the value of vaccination spurred him on to continued endeavour, and his strong and sagacious grasp of every essential principle of the practice enabled him to deal with every fresh objection as it arose and with every fresh blunder as it was perpetrated. It was not given to Jenner to know all that we now know about vaccination. He hardly lived long enough to enable him to appreciate the need for re-vaccination. It was years after his death, when the children vaccinated in the early years had grown to be adults, before that essential came to be fairly recognised. Similarly in the early years experience as to the importance of sufficiency of amount of the local disease had not accumulated, and it was left to another generation to formulate the rule that the best results of vaccination can only be obtained by operating both efficiently and sufficiently. But in all other respects Jenner's knowledge of the essentials of vaccination was remarkably thorough, and in our own day little has been added to it. It has fallen to the lot of no other single member of the medical profession, or perhaps even of the human race, to be the direct means of saving so many lives, so much disfigurement, and so much concurrent grief and misery. The thanks of the world are due to-day to the quietly thinking and quietly working village practitioner in Gloucestershire, and, to quote the words of Sir John Simon, "the close of the eighteenth century, which had much to darken it, will be remembered to the end of human history for the greatest physical good ever yet given by science to the world."

THE ANNUAL REPORT OF THE SANITARY COMMISSIONER WITH THE GOVERNMENT OF INDIA FOR 1894.

[FIRST NOTICE.]

AMONG the numerous official reports rendered to different Governments that of the Sanitary Commissioner with the Government of India occupies—and in our opinion very deservedly so—a high place. The voluminous character of the Sanitary Commissioner's reports, the number of statistical tables, and the amount, as well as the variety, of material they contain are, no doubt, sources of difficulty and embarrassment to the reader; but it must be borne in mind that the facts and figures connected with the vast populations with which they deal may without hyperbole be termed colossal. The text of the report itself is nevertheless, and apart altogether from the tables and details required for official reference, always valuable and instructive, and the present volume strikes us as a very able one. It contains an amount of information, with an analysis of the results of recent researches and theories of disease, not to be met with elsewhere. A note at the commencement of the volume indicates that these annual reports will probably undergo some modification in future, for it states that the recommendations of the Army Sanitary Commission as to altering and reducing the number of the tables were received too late to be acted upon in the case of the present report.

In the case of so vast a country as India, with its imperfect systems of registration and with the large amount of disease that either escapes observation altogether or at least is subjected to no scientific observation, it may be urged that the record of figures and alleged facts is quite valueless and the labour in collecting them simply a waste of energy. But such is certainly not altogether the case, for we possess in our army and in our gaol populations scattered over different parts of India accurate and reliable tests and gauges of the medical events of any given year. The European

army in India and the native army of that country, though to a less extent, together with the inhabitants of the gaols, amount in the aggregate to a very large population living under conditions that are well known and under skilled medical surveillance. Moreover, as regards the epidemic and endemic diseases of India, these are commonly attended with some familiar features or phenomena that cannot altogether escape the notice of the least observant and usually declare their presence also by an increased mortality; and data gleaned from native races can therefore be compared with, and corrected by, those afforded by the military and gaol communities with a similar environment and living in their midst.

The urban and rural registration of births and deaths, if very far indeed from perfect as regards the native population, is still not altogether illusory and it is improving year by year, and the presence of an unusual amount of disease is soon bound to declare itself and be recorded. While we have but little sympathy with those who are content to point to what has been already done in India and to oppose further progress as if we had reached a stage of finality we have, if anything, still less sympathy with those self-satisfied, irresponsible people who make the East a touring ground for the cold weather and regard everything which differs from the Western standard of civilisation as wrong and requiring to be radically and promptly changed, regardless of the traditionary customs and feelings of the people, political expediency, and financial considerations. But to come to the subject of the report itself. Section I. deals with the meteorology of the year and gives a summary of the meteorological phenomena month by month. Section II. treats of the European army in India, and it contains much that merits and should receive grave attention. The year 1894 was a wet and unhealthy one, and the number constantly sick per 1000 was unusually high. Venereal diseases caused 34 per cent. of the total sickness and ague 27 per cent.; and of the total deaths enteric fever caused 36 and cholera 13 per cent. The total death-rate in 1893 was only 12·61, whereas in 1894 it was 16·07 per 1000 of strength. The following table gives the percentages respectively of enteric fever, hepatitis, dysentery, and pneumonia in the total deaths of each presidency in 1894.

—	Bengal.	Madras.	Bombay.
Enteric fever	36·5	30·7	36·1
Hepatitis and hepatic abscess	6·8	10·2	10·8
Dysentery	3·9	5·5	2·1
Pneumonia	5·4	3·9	2·1

The prevalence, and unfortunately increasing prevalence, of venereal diseases in the European army of India constitutes a most serious cause of inefficiency, and it is not easy to exaggerate the magnitude of the evil from whatever point of view it is regarded. The immediate effects of venereal disease are to render, we are told, 3062 men daily ineffective; but it is impossible to say how many of these men become affected with secondary syphilis. The returns only show the admissions into hospital, and one case may, of course, represent several admissions. A table at p. 43 of the report, prepared by Brigade-Surgeon-Lieutenant-Colonel Exham, and placed at the disposal of the Sanitary Commissioner by the Principal Medical Officer of Her Majesty's Forces in India, brings out the actual condition of the army as regards venereal disease in a very forcible way. It reveals the fact that of the 70,642 British soldiers present in India in July, 1894, only 37 per cent. had never suffered from venereal disease, while 63 per cent. had at some period of their service contracted it in one form or other. The ratio of admissions for these diseases in the army of India—511·4 per 1000 in 1894—is vastly higher than that of most of the Continental armies and higher than the ratios of our troops in other British possessions. There are no means of comparing the figures with those relating to the civil adult male population; but, judging from the results of inquiries by Mr. Acton in the surgical divisions of our larger hospitals in London, there is reason for believing that the disease is far more prevalent than is generally believed.

As regards the European military population of India a return to a system of long service and increased facilities for marriage seems impracticable, and the influence of moral and physical efforts—such as increased cleanliness and athletic amusements—is inadequate to cope with the evil. That the compulsory lock hospital system in India, notwithstanding all the difficulties and defects that attended its working, nevertheless did much good cannot, we think, be doubted; but public opinion and the House of Commons will not apparently tolerate new and more stringent legislation in this direction, and it is, moreover, alleged that the experience of the cantonment lock hospital system in India failed to effect that amount of reduction in the prevalence of these diseases which its advocates hoped for or the cost incurred warranted the Government in expecting. A system of voluntary lock hospitals in India on the one hand, and the provision of healthy occupations and recreations for the soldier on the other, have, however, proved inoperative. The question comes, and comes with pressing force, What is to be done? The powers of the military and police authorities to exercise a greater surveillance over illicit prostitution may be enlarged, and various things may be done no doubt in this and similar directions, but we can scarcely believe that these will form an effectual remedy. The authorities in India should certainly have the power of compelling diseased women to submit to treatment in hospital or to leave the cantonment. They would do so in the case of any other infectious disease, why not in this? A woman under such circumstances is surely an acknowledged source of danger, and of very grave danger to all who may consort with her. If the evil continues, as we fear it will, the only practical method of coping with it, as it seems to us, is by the re-establishment of a compulsory lock hospital system and by legislative enactment of some kind, carried out and applied even more systematically and stringently than before.

Some method could surely be devised by which these unfortunate women could, with every regard to humanity and considerate kindness, be treated and be prevented from spreading infectious diseases among our troops. We recognise the difficulties, but do not believe them to be insurmountable; in any case the duty of striving to limit the spread of these contagious diseases by any means in our power seems clear, and we cannot go on shirking it for ever.

We hope in our next article to deal with various other points, and especially with the summary analyses of the different views and theories at present held in regard to some of the more prevalent diseases endemic to India which are set forth in the report under review.

ANNUAL REPORT FOR 1894 OF THE MEDICAL OFFICER OF HEALTH OF THE ADMINISTRATIVE COUNTY OF LONDON.

II.[1]

WE now come to the consideration of that part of Mr. Shirley Murphy's report which treats of the influence of school attendance on the diffusion of infectious diseases. The general question of measles fatality in London has already been discussed in our notice of the Registrar-General's annual summary for 1894. It is evident, however, from the report now before us that in many London districts measles prevalence has seriously affected the regularity of school attendance, and consequently has caused much anxiety to the county medical officer and his staff. It will be remembered that in 1892 compulsory notification of measles throughout London had been suggested to the County Council by the London School Board; the former authority, however, appear to have been unwilling to incur the responsibility of so heavy an expenditure pending completion of the inquiry which the Local Government Board had undertaken with a view of determining the value of notification as a means of controlling the spread of measles in urban communities. It is surprising, however, to what extent the attendance, more especially in the infants' department of elementary schools, is reduced during an epidemic of measles. In one large school cited by Mr. Murphy the absentees from school were on one occasion 50 per cent. of the average number on the roll. Not all the children, however, were absent on account of being themselves the subjects of measles; some of them

[1] No. I. appeared in THE LANCET of May 2nd.

were kept from school because of the infected state of their homes. The notified attacks by scarlet fever were only half as numerous in 1894 as they had been in the year previous: they corresponded to an attack rate of 4·2 per 1000 of the population, against a rate of 8·6 in 1893. The case mortality, however, in 1894 was 5·2 per cent., or 0·9 per cent. higher than in the preceding year. As regards the incidence of scarlet fever on persons of different ages, the experience of 1894 accords with that of the preceding year in showing that the greatest incidence was upon children between four and five years of age. Concerning the influence of school attendance on the prevalence of scarlet fever Mr. Murphy says that the year 1894 was characterised by irregularity in the behaviour of this disease and especially by the entire absence of the usual rise in the latter part of the year. There was a decrease in the number of cases reported in the four weeks of "holiday influence" (the thirty-second to the thirty-fifth week), and the decrease was most observable among children of school ages (from three to thirteen years). Again, whilst in the four weeks following "holiday influence" there was a decrease both among infants under three and among persons over thirteen years of age, the number of attacks among children of school age increased by 33½ per cent. These facts accord with the hypothesis that the interruption of school operations was responsible for some part of the decrease in the period of holiday influence of attacks at school ages, and that the increase of attacks amongst school children in the subsequent four week period was largely due to the reopening of the schools. Mr. Shirley Murphy is convinced of the correctness of his hypothesis by the experience of the four years 1891–94. The records of the last-mentioned year furnish evidence of the occurrence of subsequent cases of scarlet fever shortly after the return from hospital of antecedent cases. In one district 24 instances of this misfortune are reported to have occurred in this year alone.

With reference to diphtheria prevalence in London Mr. Shirley Murphy reminds us that the notification statistics of the year 1893 showed that when school operations were suspended by the summer holidays there was a *notable diminution* in the prevalence of diphtheria, especially among children at school ages, and, further, that a *marked increase* followed the reassembling of children after the holidays. Precisely the same facts are revealed by the diphtheria notifications in 1894. A table in the report shows that, as had been the case in the previous year also, there was a considerable *falling off* in the notifications at school age during the four weeks of holiday influence and an even greater *rise* in the ensuing four weeks. Mr. Murphy further remarks that the August depression of the diphtheria curve in his diagram showing attacks under three years occurs somewhat later than the depression in the school age curve in a way to suggest that children under three had been infected by their older brothers or sisters, and that the decrease in the frequency of attack amongst the former was due to diminished opportunity of infection from the latter. This behaviour of diphtheria had also been noted in the year 1893. In regard, therefore, to the influence of school attendance on the spread of diphtheria as well as of scarlet fever the experience of 1894 teaches the same lesson that the preceding year had taught, and in commenting on this circumstance Mr. Shirley Murphy pertinently remarks that the attention of medical officers of health and of school authorities should be directed to the perfecting of measures for counteracting as completely as possible the tendency of the aggregation of children in school to spread infection.

The incidence of enteric fever in 1894 was somewhat lighter than in the year previous. There was, however, a notable increase in the number of attacks in the forty-ninth, fiftieth, and fifty-first weeks. This distribution of attacks in 1894 was exceptional and inquiry showed that the abnormal increase was not due to special local prevalence, but was manifested over a large area of London. It was observable in the populations supplied by all the water companies except the East London and Kent Companies. Chemical investigation showed that an intimate relation existed in these weeks between the condition of the waters supplied for drinking purposes and the condition as to flood of the rivers from which these waters were derived. Certain notable floods in November materially altered the condition of the drinking-water at a time when some new factor probably came into operation which led to increased prevalence of enteric fever in London. Mr. Shirley Murphy thinks that this increase may be best explained on the hypothesis of water-borne contagion. In an instructive memorandum on this subject he shows that whereas in the four-year period 1890–93 there had been a decrease in the number of cases notified in the forty-ninth, fiftieth, and fifty-first weeks, in the same weeks of 1894 there were, contrarily, an increase. Regretting the fact that the statistics of only a few years can be placed under contribution in order to determine what is the normal behaviour of enteric fever in London, Mr. Murphy observes that "an *increased* relative *prevalence* of enteric fever *over a very wide area* at a time when enteric fever might be expected to *decrease* raises questions whether or not the disease has been disseminated by water. All the usual modes of diffusion of infection—contaminated milk, insanitary conditions, &c.—are discussed in this memorandum, and are dismissed as inadequate for the production of an abnormal disease prevalance of such wide distribution as that which actually took place, and the conclusion arrived at is that the hypothesis of water-borne contagion affords better explanation of the increase in question than any other which has been suggested. These considerations appear to Mr. Murphy to indicate the need for watchfulness over the distribution of enteric fever in London in relation to its water-supply. The investigation of the causes leading to unequal distribution of phthisis in London districts has recently been greatly facilitated by the action of the General Register Office, which now publishes in its quarterly and annual reports the true death-rates of the sanitary areas from this disease, the deaths occurring in hospitals, workhouses, and lunatic asylums having been referred to the localities from which the patients originally came. Accordingly, Mr. Murphy has availed himself of the Registrar-General's figures to construct a chart which exhibits graphically and by means of appropriate shading the distribution of mortality from phthisis in the year 1894. Examination of the chart shows that the areas with highest mortalities from phthisis are mainly the low-lying spots near the river, which are equally notorious for heavy mortality from causes other than this. The phthisis mortality for London averages 1·7 per 1000 living, but it varies greatly in the several districts. It does not exceed 9 in 10,000 in the high grounds of Hampstead, and averages 11 in four other districts, whilst it ranges upwards to 29 in St. Saviour Southwark, 31 in Hackney, and 32 in the sanitary district of the Strand. Mr. Murphy further shows the relation subsisting between "overcrowding" and phthisis fatality. From the census returns the proportion is ascertained of the population occupying tenements of one, two, or more rooms and in which there are more than two persons in each room. Employing the term "overcrowding" to represent such usage and grouping the various districts according to the overcrowding therein existing, it is shown that the phthisis mortality in these groups increases with the overcrowding. Thus we find that in districts where the proportion of population living two or more in a room does not exceed 10 per cent. the phthisis mortality is relatively low (10·7 per 10,000), whilst in districts where the proportion exceeds 35 per cent. phthisis kills at the rate of 24·6 per 10,000 of the population. It is also found that the mortality from causes other than phthisis increases with overcrowding in like manner.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

AN ordinary meeting of the Comitia of the Royal College of Physicians of London was held at the College, Pall Mall East, on the 30th ult., Dr. SAMUEL WILKS, the President, being in the chair.

Various formal communications were read from the Royal College of Surgeons of England.

The Rev. Thomas Bramley, husband of the daughter of the late Dr. James Copland, wrote offering for the acceptance of the Royal College of Physicians of London a portrait in oils by Room of Dr. Copland. A vote of thanks was passed on the suggestion of the President, who gave some personal details of his acquaintance with Dr. Copland as the writer of the well-known Dictionary of Medicine and as a President of the Pathological Society. Dr. Bagshawe offered to the Council a collection of engraved portraits and autographs of surgeons and men of

science formed by the late Dr. Greenhill, and this was also accepted with thanks.

A letter from the headmaster of Bury St. Edmund's school asking for a copy of the engraving of Sir Thomas Watson, to be added to the collection of worthies who were educated there, was read and the request was agreed to.

Dr. Lauder Brunton and Dr. Saundby resigned their respective examinerships.

Mr. Sinclair Gillies, M.B. Lond., of St. Bartholomew's Hospital, on the report of the examiners, was awarded the Murchison Scholarship with special commendation.

The following Members were elected as Fellows:—John Anderson, C.I.E., M.D. St. And.; Sir Hugh Reeve Beevor, Bart., M.D. Lond.; Harry Campbell, M.D. Lond.; Charles Montague Chadwick, M.D. Oxon. (Leeds); John Michell Clarke, M.D. Camb. (Clifton, Bristol); Arthur Gamgee, M.D. Edin. (Lausanne, Switzerland); William Hunter, M.D. Edin.; Arthur Pearson Luff, M.D. Lond.; Ernest Septimus Reynolds, M.D. Lond. (Manchester); and William Aldren Turner, M.D. Edin.

The following gentlemen having passed the required examination were admitted as Members:—Arnold Francis Bill, M.B. Oxon., Robert Henry Cole, M.D. Lond., Charles Arthur Mercier, M.B. Lond., F.R.C.S. Eng., Thomas George Stevens, M.D. Lond., F.R.C.S. Eng., and Arthur John Whiting, M.D. Edin. Licences were granted to a large number of candidates.

The quarterly report of the Finance Committee and the reports of the Committee of Management and of the Laboratories' Committee were read. The statistics of the examinations for the Licence and the list of books presented to the library during the past quarter were also placed before the Comitia.

THE HISTORY, METHODS, HINDRANCES, EXPENDITURE, AND POLICY OF THE CIVIL RIGHTS DEFENCE COMMITTEE.

(Continued from p. 1159.)

HINDRANCES.

IN prosecuting their labours on behalf of Mr. Anderson, and the important rights both of British subjects generally and of the members of the medical profession in particular which are involved in the case, the Civil Rights Defence Committee has had to contend with several obstacles, some of which have not yet been fully overcome. During the earlier stages of the work of the Committee there had been much misapprehension on the subject of "maintenance," or the offence of illegally contributing to carry on, or promote, actions at law without being connected with, or having any real interest in, such actions or their results. To avoid any such question the Committee undertook the case of Mr. Anderson, obtaining special leave to appeal to the Privy Council to provide funds for the other side as well, and to this Mr. Anderson gladly consented. The ideas and difficulties as to maintenance have now entirely disappeared, it being fully realised that every man, woman, and child in the Empire has an interest in, and a right to unite in defending, the rights and liberties of all British subjects. It has been already mentioned that Lord Stamford's letter giving a *précis* of Mr. Anderson's case and strongly appealing to the public for support was sent to 250 leading newspapers in London and the provinces, but that, with the exception of a brief abstract in the *Times* and short notices in a few other papers, it did not receive insertion or comment. It will, therefore, be seen how difficult it is for the Committee to avail themselves of the services of the public press for applying to the community for the funds necessary to prosecute the appeals to the Privy Council and to the House of Lords. The medical journals are staunch supporters of Mr. Anderson, and two or three well-known lay London journals, like *Truth*, the *Pall Mall Gazette*, and the *St. James's Gazette*, and a few provincial and Colonial papers have rendered substantial aid, but what is wanted is a general awakening of the public press.

Even in the ranks of the medical profession there is a certain reluctance in some quarters to uphold the rights of medical men in regard to their liberty of action to make stipulations as to fees, to decline attendance, and to retire from attendance of patients under particular circumstances where no injury is thereby inflicted—rights which are impugned by the still unquashed decisions of the Court in Trinidad in the case of Mr. Anderson. For instance, a medical practitioner whom the Committee endeavoured to influence in defence of these rights dissented from the principles above mentioned and generally accepted in the profession, considering it contrary to the duty of a medical man to make any stipulation before rendering his services as it seemed to be taking an unfair advantage similar, as he expressed it, to "holding a pistol to a man's head." Then, again, there has been considerable disinclination displayed on the part of medical corporations and bodies concerned with professional interests to take up Mr. Anderson's case by sending representatives to the Civil Rights Defence Committee and rendering pecuniary aid. In London the only corporation represented on the Committee is the Royal College of Surgeons of England, an obligation which the Council could not well escape in face of Section XV. of the By-laws, which expressly stipulates that "The Council will at all times protect and defend every Fellow and Member of the College who may be disturbed in the exercise and enjoyment of the rights, privileges, exemptions, and immunities acquired by him as a Fellow and Member or Member thereof." It is worthy of note that the solicitor of the College was of opinion that Mr. Anderson's case did not come under the meaning or operation of the by-law, but the common sense and good feeling of the Council rose superior to legal subtleties. The representation on the Committee of the Council of the Royal College of Surgeons of England is a tower of strength to Mr. Anderson, but, on the other hand, the Royal College of Physicians of London, the University of London, the Apothecaries' Society, and the General Medical Council are not represented. The removal of these hindrances to the success of the work undertaken by the Civil Rights Defence Committee is so important that it is desirable to enlarge upon those which are still in operation.

As the case stands, there is no security for the enjoyment of the liberties and rights which are the heritage of Englishmen or for the special professional rights of medical men. The latter may be stated to be the following: (1) the exclusive right to practise the medical profession for remuneration according to its customs and ethics in peace, free from the illegal institution of vexatious or speculative actions at law or other violence or disturbance; (2) the exclusive right to recover at law remuneration for professional work and services rendered; and (3) the right to refuse to attend in any case whatever—to refuse to attend unless satisfied of payment or if payment is refused or evaded; to refuse to attend or discontinue attendance for any reason that appears to render such a course desirable. If it be objected that the complaints of Mr. Anderson are injuries done to one man by the malice of the judges in a distant colony, and are never likely to be, never could be, repeated in this country, if even in any colony, it must be remembered that—1. The only appearance of redress or protection was obtained by the action brought in England against the offending colonial judges and by means of the right conceded by Justices Cave and Charles to sue the judges and to take the case to a British jury, on the ground that illegal and malicious acts done by a judge are *not* judicial acts. But it is now declared by the judgment of the Court of Appeal in Anderson *v.* Gorrie that all, even the most extreme violation of Mr. Anderson's rights were (*a*) judicial acts and (*b*) were not actionable, and (*c*) that Mr. Anderson had no right to go to a jury and (*d*) therefore had no right to protection. Judicial acts are acts done by authority of the Crown wielded by the judge. 2. Under this decision any judge may do any illegal injury to anyone in disfavour, may instigate the most frivolous and baseless claim or counter-claim, and on it may deprive a medical man of his earnings, give punitive damages against him, and seize his goods and imprison him to make him pay. All these injuries were done to Mr. Anderson and all are declared now to be judicial acts. 3. The right of remedy by suing for compensation and redress and submitting the claim to a jury is by this decision absolutely taken away in case of the injury being accomplished by the agency of a judge who, in depriving us of our rights to charge or recover, and in punishing us for refusing to attend for nothing or when insulted, is now declared to be using the authority of the Crown.

It is clear, then, that if perversions of justice by judges, if malicious acts by judges are to be called judicial acts, if all the charters of our liberties may be violated by judges with impunity, the right to sue for compensation being taken away, the subject and the professional man are left without protection from wrong and without any means of obtaining remedies for injuries wilfully, wantonly, and illegally inflicted. But this being contrary to the fundamental maxim that there is no wrong without remedy it becomes necessary for some other remedy to be devised. It may be that actions against judges are inexpedient and that they should be punished only by the Crown or by Parliament, but no punishment, such as removal from office, inflicted on a judge affords compensation to the person injured by the illegal acts of a judge, and, therefore, if for sound reasons of State the right to sue the judge be abrogated, it remains for Parliament to provide the means of redress to the injured individual. The Civil Rights Defence Committee is not wedded to any particular course, but is only interested in securing the means of remedy for admitted wrongs.

With regard to the objections raised to medical men recovering fees by law, entering into stipulations as to fees before attendance on patients, to their refusing to attend and withdrawing from a case before the completion of the attendance, the following considerations may be adduced. The rights involved in these conditions are elementary and fundamental. The right to charge *at all* is *lost* if the right to *recover at law* is lost, for, though many seldom or never use the right to recover at law, it is because of its existence that they are paid by numbers who otherwise would never pay. In Mr. Anderson's case even the right to stipulate to be paid and the right to decline to attend unless on an understanding to be paid were absolutely denied by the court. If these rights do not exist or are not to be exercised the medical man could not, without incurring punitive damages or imprisonment, refuse to pay a second visit till paid for the first, could not refuse the first visit to a patient who had deprived him of his honorarium in a previous illness, and must continue to visit the patient though he were vilified and insulted at every visit, and be solaced on seeking remedy by the comforting declaration that the act being that of the judge no rights had been violated and that he must rest content. Mr. Anderson was punished by damages and imprisonment and was sold up and ruined for exercising the elementary rights of a medical practitioner. If these rights are not to exist on the side of the medical man the opposite rights must belong to the public, and medical men would become the slaves of all who demanded their services.

The hindrance resulting from the disinclination of medical authorities and corporations to join in the work of the Civil Rights Defence Committee must be met by the inculcation of a higher standard of obligation on the part of these bodies. The case stands thus. The Crown has granted charters to the licensing bodies authorising them to confer diplomas or qualifications to practise the medical profession, and these diplomas convey certain definite rights and privileges. To obtain these diplomas and rights pupils flock to the medical schools, become candidates for the diplomas of the corporations, and when successful register their qualifications at the offices of the General Medical Council, by which they obtain the security of an Act of Parliament for the right to recover their fees if necessary in a court of law. The schools with their staffs, the corporations with their examiners, and the General Medical Council subsist upon the fees which they receive from the students and medical practitioners who obtain their diplomas and the rights conferred by the diplomas and by the registration of their diplomas in return for their work and their fees. In the light of Mr. Anderson's case, the supposed rights held out by the schools, corporations, and General Medical Council become empty and valueless promises, and the schools, corporations, and General Medical Council will become channels or agents of false promises. Mr. Anderson's case—and unless the decision is annulled there may soon be others like his in the future—illustrates as clearly as any case can illustrate the moral obligation resting on the schools, corporations, and General Medical Council to unite in resisting an invasion of the rights by traffic in which they themselves subsist, since by consenting to it they would consent to be agents for, and to profit by, conferring supposed rights which when relied upon may be, as they have been in Mr. Anderson's case, formally declared to be inoperative and valueless. If this is once understood and public attention is secured great public bodies with reputations to preserve will feel it to be impossible to accept so discredited and dishonourable a position, and will take their share with other public and professional bodies now engaged in the defence of these rights, now endeavouring to raise funds for the purpose of testing by appeal to the House of Lords the validity of the judgment of the Court of Appeal, and, should such appeal fail, determined to secure the correction of so great an evil by the action of the Legislature. To secure the coöperation of the medical schools, the corporations generally, and the General Medical Council would ensure success to the cause and would no doubt lead to the establishment of a recognised method and system of coöperation that would be of general and far-reaching advantage to the profession and the public.

(To be concluded.)

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND AND THE REPRESENTATION OF THE MEMBERS OF THE COLLEGE ON THE COUNCIL.

IT will be in the recollection of our readers that at the meeting of the Council of the Royal College of Surgeons of England, held on March 12th, the following resolution was passed by a small majority:—"That as the members of this Council represent the body corporate of this Royal College and consequently its Members as well as its Fellows, it is the opinion of this Council that no further representation of the Members is desirable." A discussion on the subject of the resolution, passed by the Fellows of the College at their half-yearly meeting in January by a large majority, in favour of according representation on the Council to the Members of the College, had taken place at the meeting of the Council in February, and this discussion resulted at first in the adoption of a resolution to take a poll of the Fellows on the question, but by a subsequent decision of the Council to take into consideration at the March meeting the question whether Members should or should not be directly represented on the Council before consulting the Fellows the poll was set aside altogether. It was with sincere regret that we chronicled both the adverse resolution of the Council to the Members' claims in face of the important vote of the Fellows at the January meeting and the loss of the resolution that a poll of the Fellows should be taken, and after reviewing the position and merits of the question of the representation of the Members on the Council and the state of opinion in the Council itself, as shown by the suspended minutes, we expressed our belief that it would not be surprising if these decisions should be reviewed and possibly rescinded at an early date. We are glad to be able to state that the whole subject will be reopened at the meeting of the Council on May 14th. At the March meeting of the Council Mr. Tweedy gave notice of the following motion for the meeting of the Council in May—viz.:—

"That a poll of the Fellows be taken respecting the motion passed at the general meeting of Fellows on Jan. 2nd in favour of giving to the Members of the College direct representation upon the Council, and that a committee be appointed to prepare for the approval of the Council an elucidatory statement of the subject in question together with the interrogatories which shall be submitted to the Fellows." A further step was taken at the quarterly meeting of the Council on April 9th, when Mr. Rivington gave notice that he would move at the May meeting:—

"That the following resolution, proposed by Sir William MacCormac, seconded by Mr. Bryant, and carried by 11 votes to 8, be rescinded—viz.:—

"As the members of this Council represent the body corporate of this Royal College, and consequently its Members as well as its Fellows, it is the opinion of this Council that no further representation of the Members is desirable."

Opinion upon the Council on these questions appears to be so evenly balanced that the result of the discussion will probably depend upon the accidental circumstance of the attendance or non-attendance of particular members of the Council. Half the Council voted on a former occasion in

favour of consulting the Fellows, and just less than half at the March meeting sufficed to negative the principle of representation of Members of the College on the Council. This is an anomalous condition of things, and it is obvious that even if the Council does not adopt Mr. Rivington's motion to rescind the resolution passed at the March meeting the exclusion of Members of the College from a voice in the management of the College which they do so much to support cannot be of any long continuance when they have a majority among the Fellows attending a meeting at the College and half the Council in their favour. We cannot but think that there could not be a more favourable time than the present to settle this much vexed question. A moderate concession now would be accepted by the Society of Members who are prepared, we understand, to give a fair trial to any measure agreeable to the Fellows and the Council, and it will be assuming a weighty responsibility to let the opportunity slip of uniting the Council, the Fellows, and the Members as they have never been united in the history of the College since 1843.

THE CONVERSAZIONE OF THE ROYAL SOCIETY.

THE annual conversazione of the Royal Society, held in Burlington House last Wednesday, when Sir Joseph Lister presided and received many distinguished Fellows and visitors, was from a spectacular point of view less striking than the exhibitions of preceding years. This was probably due to a great extent to the almost complete absence of purely electrical display. Not even the familiar crack of long sparking could be heard, but only the buzzing and comparatively unalarming sound of the induction coils employed in lighting up the Crookes's tube in the new photography. Photography, indeed, seemed to be the favourite subject of demonstration. That section of it now described as "new" was, as might have been anticipated, well represented by Messrs. A. A. C. Swinton, Mr. Herbert Jackson, and Mr. Sidney Rowland, the first two gentlemen adding some very effective experiments by means of the fluorescent screen. There was, however, nothing demonstrated which showed any important advance in the application of the "x" rays to medicine beyond what has already been published in THE LANCET. Turning to ordinary photography the prints exhibited by Professor Worthington were remarkable examples of the pitch to which instantaneity of photography has been brought. He showed photographs of the splashes produced by a falling drop of water, taken with the electric spark, the exposure being less than three-millionths of a second. The resulting pictures are very curious and interesting in pourtraying the disturbance. Progress in photography was also charmingly illustrated in Mr. Ives' exhibition of his stereoscopic photo-chromoscope, an instrument which records and reproduces colours more perfectly than the phonograph does sounds. The pictures shown were of singular beauty and most realistic. Mr. Friese Greene showed a rapid photographic printing machine at work which threatens to revolutionise the art of illustrating journals. The machine produces prints wholly or partly by photography, the chief object being to effect a very rapid production of copies adapted for use as illustrated supplements in newspapers, magazines, or for other purposes where a large number of copies of the same picture, design, or other objects are required. Thus it is possible to "run off" several thousand excellent photographic prints in an hour at an initial cost of a farthing each print.

Professor Clowes exhibited his ingenious apparatus for the detection of inflammable gas in electric culverts. In principle it is the same as the lamp used for measuring the amount of gas in the air of coal mines, and it is obviously adapted also for detecting and measuring the inflammable gas in inaccessible places, as in gasworks, coal-bunkers, and furnace flues. Professor Boys presided over the fragments that were left of the steel gas cylinders which were recently the subject of experimental inquiry which had its origin in the Fenchurch-street explosion. The report ultimately issued showed (1) the danger of using hard or unannealed steel for gas cylinders; (2) the extraordinary amount of violent ill-treatment to which a good soft annealed cylinder may be subjected without destruction, even when charged to 120 atmospheres; (3) the effect of very great internal pressure steadily applied; and (4) the violently destructive character of the explosion of mixed gases under pressure, which no practicable cylinder can withstand. One of the most interesting novelties in the exhibition was the "aërator" shown by Messrs. Read, Campbell, and Co. It consists of a sheet-steel bulb, not quite so large as a pigeon's egg, and containing compressed carbonic acid gas. The soda water bottle being filled with water, the "aerator" is inserted in the stopper, the closing of which liberates the gas by piercing the bulb. A few shakes complete the process, and excellent soda-water is thus quickly obtained. There is certain to be a successful future for this ingenious device. It is the best and simplest method of extemporaneously obtaining aerated water with which we are acquainted, and, further, is not expensive, the "aërators" costing probably not more than 6*d*. a dozen, and each being sufficient to make a "large soda." The "aërators" may also obviously be charged with other gases, the application of which for medical purposes is probable. Professor Roberts Austen of the Mint showed a simple and pretty experiment. By passing a current of thirty ampères through an aluminium wire a coating of oxide is almost instantly formed, which enables the temperature to be carried far above the melting point of the wire without breaking it. In fact the film of oxide serves as a pipe to contain the fluid metal. On approaching the wire with a magnet it twists about in a curious fashion, as though it were a thread of silk being turned. Specimens of boring marine animals were exhibited by the Marine Biological Association; while Mr. Walter Garstang, M.A., showed certain adaptations subservient to respiration in sand-burrowing Annelids and Crustacea. In aquatic animals which burrow in fine sand the activity of the gills would be impaired by the accumulation of sand around the gills, or in the course of the respiratory currents. To prevent this, the water before passing to the gills is "sieved" in the Annelid Aphrodite by a felted mass of fine hairs, and in Decapod Crustacea by the hairs bordering the branchiostegite. In the crabs Atelecyclus and Corystes the normal respiratory current is reversed and the water passes to the gills through a sieve-tube formed by the interlocking of rows of special hairs on the apposed antennæ.

The lantern demonstrations in the meeting-room were devoted to the beautiful colour photographs of Professor Lippmann taken by the interferential method. Later in the evening the same room was occupied by Professor Dewar, who repeated many of his remarkable experiments with liquid air at the Royal Institution.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns 6438 births and 3838 deaths were registered during the week ending May 2nd. The annual rate of mortality in these towns, which had been 19·0 and 19·5 per 1000 in the two preceding weeks, declined again last week to 18·4. In London the rate was 18·5 per 1000, while it averaged 18·4 in the thirty-two provincial towns. The lowest rates in these towns were 8·6 in Burnley, 11·3 in Brighton, 12·4 in West Ham, 13·9 in Bradford, and 14·1 in Cardiff; the highest rates were 20·4 in Oldham, 21·9 in Sunderland, 26·4 in Swansea, 26·9 in Manchester, and 28·7 in Salford. The 3838 deaths included 640 which were referred to the principal zymotic diseases, against 635 and 699 in the two preceding weeks; of these, 258 resulted from measles, 204 from whooping-cough, 67 from diphtheria, 42 from "fever" (principally enteric), 36 from scarlet fever, 30 from diarrhœa, and 3 from small-pox. No fatal case of any of these diseases was recorded in Burnley; in the other towns they caused the lowest death-rates in Norwich, Preston, Plymouth, and Leeds, and the highest rates in Croydon, Salford, Sunderland, and Oldham. The greatest mortality from measles occurred in London, Bristol, Manchester, Croydon, Oldham, and Sunderland; from scarlet fever in Salford; from whooping-cough in London, Manchester, Bradford, Salford, Bolton, and Croydon; and from fever in Halifax. The 67 deaths from diphtheria included 36 in London, 5 in Liverpool, 4 in West Ham, 4 in Birmingham, 3 in Hull, and 3 in Newcastle-upon-Tyne.

Two fatal cases of small-pox were registered in London and 1 in West Ham, but not one in any other of the thirty-three towns. There were 13 cases of small-pox under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, the 2nd inst., against 16 at the end of each of the two preceding weeks; 3 new cases were admitted during the week, against 5, 4, and 8 in the three preceding weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 2523, against 2587, 2527, and 2534 on the three preceding Saturdays; 236 new cases were admitted during the week, against 226, 201, and 236 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 328 and 287 in the two preceding weeks, rose again last week to 292, and were 53 below the corrected average. The causes of 52, or 1·4 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Cardiff, Oldham, Newcastle-upon-Tyne, and in eleven other smaller towns; the largest proportions of uncertified deaths were registered in West Ham, Birmingham, Sheffield, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 19·0 and 19·0 per 1000 in the two preceding weeks, declined again to 19·0 during the week ending May 2nd, but was 0·6 per 1000 above the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 11·9 in Leith and 17·7 in Edinburgh to 22·2 in Perth and 22·8 in Paisley. The 556 deaths in these towns included 30 which were referred to whooping-cough, 18 to diarrhœa, 11 to measles, 9 to "fever," (principally enteric), 6 to scarlet fever, and 2 to diphtheria. In all, 76 deaths resulted from these principal zymotic diseases, against 56 and 67 in the two preceding weeks. These 76 deaths were equal to an annual rate of 2·6 per 1000, which was 0·5 below the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of whooping-cough, which had been 21 and 30 in the two preceding weeks, were again 30 last week, of which 14 occurred in Glasgow, 7 in Aberdeen, 4 in Edinburgh, and 3 in Paisley. The 18 deaths from diarrhœa showed a further increase upon recent weekly numbers, and included 9 in Glasgow and 4 in Edinburgh. The fatal cases of measles, which had been 9 in each of the two preceding weeks, were 11 last week, of which 8 occurred in Glasgow and 2 in Dundee. The deaths referred to different forms of "fever," which had declined from 12 to 4 in the three preceding weeks, rose again to 9 last week, and included 2 each in Glasgow, Edinburgh, Paisley, and Greenock. The fatal cases of scarlet fever, which had increased from 5 to 10 in the four preceding weeks, declined again to 6 last week, of which 3 occurred in Glasgow and 2 in Dundee. The deaths referred to diseases of the respiratory organs in these towns, which had been 109 and 120 in the two preceding weeks, declined to 83 last week, and were 36 below the number in the corresponding week of last year. The causes of 52, or more than 9 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 20·6 and 23·3 per 1000 in the two preceding weeks, further rose to 23·7 during the week ending May 2nd. During the past five weeks of the current quarter the death-rate in the city has averaged 23·7 per 1000, the rate during the same period being 19·1 in London and 17·6 in Edinburgh. The 159 deaths registered in Dublin during the week under notice showed an increase of 3 upon the number in the preceding week, and included 10 which were referred to the principal zymotic diseases, against numbers declining from 10 to 4 in the three preceding weeks; of these, 6 resulted from scarlet fever, 2 from whooping-cough, 1 from "fever," and 1 from diarrhœa, but not one either from small-pox, measles, or diphtheria. These 10 deaths were equal to an annual rate of 1·5 per 1000, the zymotic death-rate during the same period being 3·9 in London and 2·1 in Edinburgh. The fatal cases of scarlet fever, which had been 2, 4, and 1 in the three preceding weeks, rose again to 6 last week, and exceeded the number recorded in any week during the past eight years. The 2 deaths referred to whooping-cough were within one of the number in the preceding week. The 159 deaths registered in Dublin last week included 22 of infants under one year of age, and 29 of persons aged upwards of sixty years; the deaths both of infants and of elderly persons showed a marked decline from those recorded in the preceding week. Six inquest cases and 7 deaths from violence were registered; and 58, or more than a third, of the deaths occurred in public institutions. The causes of 5, or rather more than 3 per cent., of the deaths in the city last week were not certified.

THE PUBLIC HEALTH IN THE FIRST QUARTER OF 1896.

The Registrar-General's Quarterly Report for the first three months of this year has exceptional interest. It shows the effect on the public health of a winter of almost unprecedented mildness. During each of the five months ending with March last a considerable excess of temperature prevailed, which averaged more than 3°F. for the whole period. The annual death-rate in England and Wales during the first quarter of this year was so low as 17·9 per 1000, and not less than 3·9 below the mean rate in the first quarters of the ten preceding years. The death-rate was far lower than that recorded in the first quarter of any previous year since civil registration was established in 1837. The nearest approach to so low a rate in the first quarter of the year was 19·7 in 1884 and in 1893. The remarkably low death-rate last quarter would have been still lower except for an excessive mortality from the principal zymotic diseases, mainly due to the fatal prevalence of measles and diphtheria. As might naturally be expected, the exceptional mildness of last winter most favourably affected the mortality of persons aged upwards of sixty years. The annual death rate among persons at this group of ages did not exceed 69·2 per 1000, whereas the mean rate at the same ages in the corresponding periods of the preceding ten years was 95·4. Thus the mortality among persons aged upwards of sixty years was 27·5 per cent. below the average last quarter; whereas among infants under one year of age the decrease was only 4 per cent., and among children and adults aged between one and sixty years only 15 per cent. The death-rate in towns last quarter showed even more than its accustomed excess on the death-rate in rural districts. In other words, the mildness of the winter appears to have more favourably affected rural than urban districts. The death-rate in the aggregate town districts of England and Wales was 18·4 per 1000 last quarter and 3·9 below the average: while in the country districts the rate was only 16·6 and was 4·2 below the average. Thus during last quarter the urban rate was 11 per cent. in excess of the rural rate, whereas the average excess in the first quarter of the ten preceding corresponding quarters was only 7 per cent. This result is obviously due in great measure to the fact that in country districts the population includes a far larger proportion of elderly persons than it does in urban districts, and we have seen that the mild winter most favourably affected the mortality of elderly persons. The main feature of the mortality returns just issued as regards zymotic disease was the exceptional fatality of measles, the annual death-rate from which during the quarter was 0·70 per 1000 and 0·27 above the average rate in the first quarters of the previous ten years. This rate from measles was 0·96 in the 100 largest towns, while in the remainder of England and Wales it was less by one-half, or 0·48 per 1000. Among the largest towns the rate was 1·82 in Leicester, 2·10 in Salford, and 3·25 in Norwich. Still higher rates prevailed in some of the smaller towns. Diphtheria, although far less fatal than measles, showed a larger increase in the death-rate compared with the ten years' average. The highest death-rates from this disease occurred last quarter in London and its suburbs, Birmingham, Wolverhampton, and Halifax. If we exclude the exceptional fatality in the metropolitan district, the death-rate from diphtheria was almost identical last quarter in the urban and in the rural groups of districts. Small-pox caused 192 deaths in England and Wales last quarter, of which not fewer than 144 occurred within the city of Gloucester. The mortality from whooping-cough, scarlet fever, and enteric fever was in each case below the average. In conclusion, the remarkable further decline in the birth-rate calls for notice. Notwithstanding the recent recovery in the marriage-rate the

birth-rate in England and Wales last quarter was unprecedentedly low and was only equal to 29·1 per 1000. This rate was 2·6 per 1000 below the mean rate in the ten preceding corresponding quarters, and 3·0 below the rate in the first quarter of last year. The decline in the English birth-rate is an increasing decline. In the four last periods of five years the birth-rate has successively averaged 35·4, 33·5, 31·4, and 30·5 per 1000. Thus in its effect on the population of England and Wales the constant decline in the death-rate is neutralised by the equally constant decline in the birth-rate.

THE SERVICES.

MOVEMENTS OF THE MEDICAL STAFF.

THE following officers have arrived from India on completion of a tour of service:—Surgeon-Lieutenant-Colonel Donovan and Surgeon-Majors Hart, Swabey, and Mosse. Surgeon-Captain Shaw has embarked for South Africa. Brigade-Surgeon-Lieutenant-Colonel Brown and Surgeon-Majors Donaldson and Tidbury have been appointed to Cork, Surgeon-Major Cusack to the Curragh, and Surgeon-Major Cowen and Surgeon-Captain Carter to Dublin.

ARMY MEDICAL STAFF.

Surgeon-Major-General Sir William Alexander Mackinnon, K.C.B., Q.H.S., Director-General, Army Medical Department, is placed on retired pay. Surgeon-Major-General J. Jameson, M.D., has been appointed Director-General, Army Medical Department, vice Surgeon-Major-General Sir W. A. Mackinnon. Surgeon-Colonel Alexander F. Preston, M.B., to be Surgeon-Major-General, vice J. Colahan, M.D., retired. Brigade-Surgeon-Lieutenant-Colonel George J. H. Evatt, M.D., to be Surgeon-Colonel, vice A. F. Preston, M.B. Surgeon-Lieutenant-Colonel John Dallas Edge, M.D., F.R.C.S.Irel., to be Brigade-Surgeon-Lieutenant-Colonel, vice J. H. Reynolds, V.C., M.B., retired. Surgeon-Lieutenant-Colonel Charles E. Dwyer to be Brigade-Surgeon-Lieutenant-Colonel, vice G. J. H. Evatt, M.D.

NAVAL MEDICAL SERVICE.

The following appointments are announced:—Surgeons: C. Strickland to the *Mohawk*; W. G. Stott to the *Magnificent*; P. N. Randall to the *Victory*, additional for the *Duke of Wellington*; and A. G. Wildley to the *Cruiser*. Surgeon and Agent: W. J. Shaw at Redheugh.

ARMY MEDICAL RESERVE OF OFFICERS.

Surgeon-Captain David Thomson, M.D., to be Surgeon-Major.

YEOMANRY CAVALRY.

Nottinghamshire (Southern Nottinghamshire): Henry Williams, gent., to be Surgeon-Lieutenant.

VOLUNTEER CORPS.

Artillery: 1st Hampshire (Southern Division, Royal Artillery): The appointment of Mr. E. F. Eliot as Surgeon-Lieutenant is cancelled at his own request. 1st Caithness: Surgeon-Lieutenant-Colonel G. Banks, M.B., resigns his commission, but is permitted to retain his rank and to continue to wear the uniform of the corps on his retirement. 2nd Glamorganshire: Surgeon-Lieutenant A. Hood, M.B., resigns his commission. *Rifle:* 1st Volunteer Battalion the Queen's (Royal West Surrey Regiment): Surgeon-Captain C. W. Philpot, M.D., resigns his commission.

THE OUTBREAK OF ENTERIC FEVER AT ALLAHABAD.

The *Pioneer Mail* of April 16th gives an account of a recent outbreak of enteric fever in this cantonment. It seems that the disease began in the autumn of last year in the Royal Irish Fusiliers. The corps moved in relief to Burma, and was succeeded by the Norfolk regiment, in which after some weeks' interval a few cases of the disease occurred in February of the present year, and these were followed by others at a later date. Up to the present time forty-seven cases and upwards of twenty deaths have occurred. Allahabad is stated to have probably the best managed dairy-farm in India, and it has water-works which recently cost between twenty and thirty lakhs of rupees. Mr. Hankin, the Government bacteriologist, has recently made a searching investigation into the causes of this severe outbreak. The pipe-water as drawn from the taps has been found to be excellent, and that drawn directly from the barrack-room filters was also good, but the water in the *surais* on being subjected to a bacteriological examination was found to be most impure. The subject is still under investigation, and we shall probably learn subsequently more about it; meanwhile we must content ourselves with a bare statement of the facts as given by our contemporary.

THE MATABELE RISING.

The news connected with the Transvaal crisis has been of so exciting a character of late that it has for the most part absorbed public attention to the exclusion of the events connected with the Matabele rising. The inhabitants of Bulawayo seem to be quite capable of holding their own until the arrival of reinforcements; indeed, it is stated that owing to the successful attacks that have been made upon the Matabeles the neck of the insurrection is broken, and that all danger will probably be over before the arrival of the Imperial troops at Bulawayo. The forces proceeding to its relief have, owing to the prevalence of cattle disease, to encounter great difficulties in the way of transport and supplies. The wounded in Bulawayo are reported as doing well.

CHOLERA AT CALCUTTA.

Cholera has been unduly prevalent of late in Calcutta. During the week ending April 4th there were 235 deaths from cholera, against 179 and 114 in the two preceding weeks. The number is higher than the average of the past quinquennium by 180. To arrest the progress of this disease at Tarkessar the Commissioner of the division prohibited the East Indian Railway authorities from running special trains during the time the great fair was held there last month. According to Indian experience cholera may be expected to prevail early in the year in the eastern districts and late in the year in the western districts of the province. In Lower Bengal, when the surface is under water, cholera is extinguished as a fire would be.

THE MEDICAL STAFF CORPS.

The Director-General, Sir William Mackinnon, K.C.B., in issuing his last corps order, has expressed his farewell wishes to all ranks and also his appreciation of the work done by them during his tenure of command. He earnestly trusts that each soldier will always endeavour to uphold the reputation of the Medical Staff Corps and do his utmost to maintain its efficiency both in peace and war.

DEATH IN THE SERVICES.

Mr. James Flanagan, L.R.C.S.Irel., R.N., Deputy Inspector-General of Hospitals and Fleets (retired), at Portsmouth, on the 30th ult., aged sixty-one. He was Assistant Surgeon in charge of the *Shannon* Naval Brigade during the Indian Mutiny (Indian medal and clasp), and was specially promoted for his services.

His Excellency the Commander-in-Chief has accepted the invitation of the senate of the Army Medical School to preside and distribute the prizes at the termination of the present session of the Army Medical School.

Three hundred and eleven patients were admitted to the Royal Victoria Hospital, Netley, on April 28th *ex* H.M.'s troopship *Malabar* from Bombay. This was the last voyage of the *Malabar* as H.M.'s troopship.

ABERDEEN UNIVERSITY BUILDINGS EXTENSION.—The special effort made to raise £10.000 before May 1st, so as to secure Mr. C. W. Mitchell's subscription of £6000, was successful, £200 above the sum required having been contributed at that date. The scheme was inaugurated in 1891, and the total sum collected up to May 1st was £109.365 8*s.* 10*d.*, made up as follows: General public (including £10,000 from the Aberdeen town council), £42.365 8*s.* 10*d.*; Government, £40,000; the late Dr. Charles Mitchell, Jesmond Towers, £21.000; and Mr. C. W. Mitchell, Jesmond Towers, £6000. The £16.000 referred to will go towards the erection of the south wing at Marischal College. Good progress is being made with the north wing. More money is required to complete the scheme and no final answer to the application to Government for a further grant of £40.000 is expected for about three months. Meantime additional subscriptions from private sources continue to come in. Should the funds permit of the scheme being carried out in its entirety Marischal College will be the largest and finest granite building in the United Kingdom.

Correspondence.

"Audi alteram partem."

"THE REGISTRATION OF MIDWIVES."

To the Editors of THE LANCET.

SIRS, I can perhaps give no higher praise to the admirably wise and judicial deliverance in your issue of April 25th upon the above subject than to say that it is worthy of the reputation of the Editors of THE LANCET. As I have had the misfortune—as a punishment for my sins, I suppose—to become interested in the midwives question I crave your indulgence in order to place before your readers some thoughts which have occurred to me in connexion therewith. It has been the grave misfortune of the British Medical Association, in attempting to deal with this important subject, that it has apparently derived both its inspiration and its ideas from the Midwives' Institute, and that, so far as I can judge, the matter has been but little considered either from the standpoint of our profession or that of the public. In what I desire to say on the subject I shall endeavour, as far as possible, to do justice to all three. In connexion with any proposed legislation the initial point to determine is the achievements to be aimed at, and in connexion with the present matter I regard these as mainly three in number:—1. To help and protect the poor. As labour of this kind is familiar to every member of our profession from his professional cradle to his very grave, I feel sure that any wise proposals in that direction will meet with nothing but a generous and hearty response from every one of us. 2. To maintain the just rights and liberties of the profession. The Medical Act of 1886 was, I understand, passed into law in the interests of the public and in order to protect them from the dangers arising from the employment of partially and incompletely educated medical practitioners. These dangers are quite as real to-day as they were in 1886, and midwifery certainly ought not to be the least important part of a medical man's training. The door of our profession stands as widely open for women as it does for men and all are welcome who enter in that way; but attempts to get over the wall (as proposed by these Midwives Registration Bills) are sometimes devoid of an honest intent and ought to be very carefully attended to. 3. To deal justly with so-called midwives. The extensive employment of these women by the poorer members of the community has rendered them an apparent necessity of our civilisation, and the wise course for our profession to pursue is to recognise the fact and deal fairly and honestly with the same. Having thus indicated the chief objects to be aimed at in any proposed legislation, I pass on to consider very briefly the principles which should guide that legislation, and these, also, are in my opinion mainly three:—1. To maintain the Medical Act of 1886. This I have already dealt with, and it does seem to me that the profession which is not prepared to defend and maintain its lawful rights and privileges never deserved to have any. 2. The local registration of midwifery nurses by the medical officer of health. The advantages of such a course as distinguished from the creation of a national register for these women seem to me to be as follows. (*a*) It meets the circumstances of the case. When I reflect that there are from 20,000 to 30,000 midwives in England and Wales, and that on an average the professional training of these women has probably cost less than a five-pound note, the need for a national register in order to conserve an educational training of that value is not apparent, and such a register in their case would be very likely to bring national registers into contempt. (*b*) It would be efficient. There is little doubt that as far as it goes our sanitary service deserves this character. In urban districts, where the medical officer of health is exclusively devoted to the duties of his office, there is no doubt that he would deal perfectly justly with these women, and would, in his desire to keep down his puerperal mortality, exercise upon them an enormous influence for good. We should have in this case direct medical supervision in the best and I believe the only possible sense. Where the medical officer of health is engaged in general practice safeguards against injustice ought to be provided by permitting an appeal either to the medical officer of health for the county or to some other impartial authority. (*c*) It would be cheap because the machine for its administration is already in existence. The creation of an administration anything like so efficient in connexion with a national register would annually cost an enormous sum of money. (*d*) It would be a register for sanitary purposes only, and I confess that with the best intentions possible I quite fail to see what just claim existing midwives have to anything more exalted. 3. The training of the midwifery nurse. Nursing is essentially a practical matter, involving little or no theory, and the training should for that reason be as far as possible practical also. There is a real danger of the training of these nurses being pitched too high, and I consider that six months' residential training in a public lying-in hospital or union infirmary, where there are not less than fifty confinements per annum, conducted in every case under the direct supervision of the resident medical officer, would meet the requirements of the case.

These are, Sirs, it seems to me, the main principles to be held in view in connexion with any proposed midwifery legislation, but there are several others of great but secondary importance. No medical practitioner, for example, should be permitted to undertake the training of these women until he has satisfied the General Medical Council as to his capacity to comply with the requirements of the Act, and he should be responsible to that body for the discipline and efficiency of the training imparted. The question of an examination is also important and one requiring careful consideration. I have little confidence in, and less admiration for, midwives' examinations as hitherto conducted, and I believe that this much over-done ceremony might in their case be dispensed with with advantage. The British public are an extremely efficient set of examiners. In any case the setting up under legal authority of special examining boards for the exclusive use of these women is, in my opinion, an error of judgment. If the General Medical Council is fit to govern the great profession of medicine it is quite competent to deal efficiently with such a trifling matter as the examination of these midwives, and the whole matter should be left in its hands. Having received her training it would be possible for the midwifery nurse to follow one of two courses—viz., either to go out as a monthly nurse under a medical practitioner (in which case her training would be an inestimable help and boon to him and a very distinct and palpable advantage to the public) or she might at once—or after a year or two's experience as a monthly nurse—get registered by the medical officer of health and undertake the duties (subject to the sanitary and other conditions furnished her by that official) now discharged by so-called midwives. When so registered the midwifery nurse would, of course, only attend cases devoid of complications within the meaning of the Act.

When I consider, Sirs, the average cost of the training of existing midwives—on an average certainly not more than £5—and also consider that in the Act suggested the cost would probably not exceed £10, and when I reflect upon the very substantial earnings of good monthly nurses and midwives, I entirely fail to see how under such an Act any injustice could arise to these women. This essentially sanitary scheme of registration has at least the advantages of being simple, of being cheap, and, for the purposes which it is intended to accomplish, of being efficient. If carried into law it would, in my opinion, do the profession no harm, it would do the better class of midwives some good, and it would very certainly materially reduce the puerperal mortality for England and Wales in the course of a few years. I should be very glad to be able to believe that some much more ambitious projects were capable of doing as much good and as little harm.

I am, Sirs, your faithfully,

Salford, April 27th, 1896. WILLIAM FRASER.

MATERNAL SYPHILIS.

To the Editors of THE LANCET.

SIRS,—Dr. Shaw-Mackenzie's courteous criticism of my first Hunterian Lecture calls for but short reply from me. The view that inherited syphilis in the infant is in every instance derived from the mother is, I should have thought, sufficiently refuted to need no further demonstration on the point. To have entered at any length on this part of the subject would have seemed to me equivalent to dealing with the proverbial "man of straw." I would readily grant that

transmission through the germ is much more easily comprehensible than that through the sperm, but I would contend that all facts confirm inheritance from the father independently of the mother. Some obscurity in my language has doubtless led to a misapprehension on Dr. Shaw-Mackenzie's part. I never intended drawing any percentage between the two sets of cases, in the one of which the mothers were apparently healthy and in the other undoubtedly syphilitic. Without having gathered any statistics on the point I should from personal impressions consider that the cases of inherited syphilis where the mother is apparently free outnumber those where she is obviously syphilitic by three or four to one. Dr. Shaw-Mackenzie's statistics from Mr. Henry Lee's note-books will be of interest. The value of their bearing on the point at issue, however, will be vastly discounted by the consideration that they probably only relate to women coming under notice for obvious syphilis. Dr. Shaw-Mackenzie's experience at children's hospitals probably furnishes the truer view of the state of affairs as regards the mothers of syphilitic infants in general. To one of his statements I must take strong exception, and this is that immunity to syphilis, partial or complete, is the equivalent of the acquisition of the complaint itself. I shall look forward with pleasure to the appearance of Dr. Shaw-Mackenzie's paper in your columns, and shall possibly find occasion to comment on it.

I am, Sirs, yours truly.

Upper Berkeley-street, May 5th, 1896. J. A. COUTTS.

"THE BRONCHITIS KETTLE AND POULTICES IN PNEUMONIA."

To the Editors of THE LANCET.

SIRS,—I am glad to see in THE LANCET of April 18th that Dr. F. de Havilland Hall draws attention to the treatment of acute lung affections, and in particular to the use of bronchitis kettles, poultices, and diet. It has too long been the custom to follow the stereotyped method without giving the matter that consideration which it deserves. For some time I have failed to see the *rationale* of the treatment of pneumonia with poultices, and consequently they are now banished from my list of remedies, with, I am convinced, much better results than I formerly obtained with them. To load a person's chest with an accumulation of evil-smelling and uncomfortable material whilst he is suffering from respiratory difficulties seems contrary to common sense, when to open the window and secure to him a breath of fresh air which he so much desires would much better meet the requirements of the case. If there is any advantage in a poultice, which I very much doubt, it is greatly outbalanced by the dangers of an ever-changing temperature in the region of the chest as must follow a succession of poultices. I have used Gamgee tissue now for some years and am satisfied that my results have fully justified its use. As far as diet is concerned, in cases of pneumonia I believe in giving the patient a fairly free scope; during the acute stage there is usually a dislike for food of any kind, and to try to force it at painfully regular intervals seems more cruel than kind. To give an instance, I have recently had a case of pneumonia in a child four years of age. The temperature stood at 105° F. for ten days: there was complete anorexia during the whole period, so I ordered milk with a little lime-water, cold water, and barley-water; these satisfied the patient's craving for liquids and being cold were more acceptable. The mother, fearing the child would become exhausted, gave some sickly preparation resembling beef-tea, which was immediately expelled; the experiment was not again tried. On the eleventh day the temperature went down to 99°, the appetite returned, the tongue cleaned, and the recovery was a rapid one. The child's cry for solid food was gratified and no discomfort followed. The bronchitis kettle I have no experience of.

I am, Sirs, yours faithfully,

Darwen, April 30th, 1896. F. G. HAWORTH.

"THE NEW PHOTOGRAPHY."

To the Editors of THE LANCET.

SIRS,—In conjunction with Mr. John Aitken I have been working for some time at a means of shortening the exposure required for the new photography. We first tried painting a platino-cyanide solution on to the sensitive film, but found that it injured the emulsion and made the negative difficult to fix. We also tried various forms of interposed fluorescent screens which, though they much shortened the exposure, interfered with good definition. Lastly, in consequence of your article on the use of fluor-spar placed behind the film, we have made, with Mr. Bidwell's help, some experiments in this direction. I may sum up the results we have obtained as follows: celluloid negatives should be used in place of glass; the fluor-spar should be finely powdered and pressed well against the film; the fluor-spar should be thoroughly removed before developing; the exposure time is reduced to about one-third of the ordinary exposure; definition is not interfered with; calcium tungstate may be used in place of the fluor-spar and appears to exercise a more marked effect; and platino-cyanide screens may also be made use of.

I am, Sirs, yours faithfully,

DAWSON TURNER, M.D. Edin., M.R.C.P. Lond.,
Lecturer in Physics at Surgeons' Hall, Edinburgh.

George-square, Edinburgh, April 20th, 1896.

THE NILE EXPEDITION.

To the Editors of THE LANCET.

SIRS,—Having recently returned from the Nile I have read your article on Egypt with much interest. I fully agree with what you say concerning the sanitary condition of Cairo and some of the towns up the river, but I disagree with you as to the probable result of the advance of the Nile expedition. Aswân I consider one of the healthiest of the health resorts on the upper reaches of the Nile, but visitors have been constantly scared during the past winter by the Dervish raids which have taken place between Wady Halfa and Aswân. One of these raids took place while I was myself at Aswân, and I can assure you it very greatly accelerated the return of Europeans down the Nile. The Dervishes having the rich province of Dongola to fall back on, from which they draw their supplies, are able practically to make these raids with impunity. There will be no safety for the upper reaches of the Nile until the Egyptian Government holds Dongola. I therefore think that a military expedition to Dongola will aid instead of retard the sanitary and social conquest to which you refer by rendering safe the upper reaches of the Nile. It is no good going in for costly sanitary improvements with a view of attracting invalids until the frontier is safe—patients will not go where they are liable to constant scares from Dervishes. Thanking you in advance for the insertion of this letter in your valuable journal,

I am, Sirs, yours faithfully,

EDWARD STEWART, M.D. Brux., M.R.C.P. Lond.

East Grinstead, May 2nd, 1896.

SAFE *v.* DANGEROUS ELECTRIC LIGHT CURRENTS.

To the Editors of THE LANCET.

SIRS,—As I have always, from practical experience, contended that electric light and power can be more efficiently and economically supplied to towns and urban districts within a radius of five or six miles by using continuous currents rather than high-pressure alternating currents, I was, to settle as far as possible the question of danger, impelled to write to the Board of Trade for information. To my letter of inquiry they have courteously replied as follows: "In reply to your letter of the 9th inst. I am directed by the Board of Trade to state that they have been informed of nine cases of fatal accidents to employés at generating or transforming stations where high-pressure alternating currents are used, but that no instances have been reported in the case of low-pressure continuous currents." As the information received is of great public interest I trust you will see the desirability of making this known to your numerous readers.

I am, Sirs, yours truly,

Electric-avenue, S.W., May 4th, 1896. A. L. FYFE.

*** The Board of Trade have given the answer that might have been expected. To give the comparison any real value it should have been made between alternating and continuous currents having the same effective voltage. There are reasons for supposing that high-pressure continuous current of, say, 1000 volts—e.g., as at Oxford—would by its electrolytic effect prove more dangerous than a sinusoidal

current of the same effective voltage. It is true that the regulation which limits the low-pressure alternating current-supply to 250 volts and allows 500 volts for continuous current seems to imply that the former is the more dangerous. If the Board of Trade really hold this view the grounds upon which it is based have not, so far as we are aware, ever been made public. It may be that the idea is simply a survival of an opinion founded on certain "classic" experiments of Sir W. Siemens made in the days of comparatively crude machines; and, inasmuch as there may still exist in actual work certain alternators giving a very "peaked curve"—that is to say, whose maximum electro-motive force greatly exceeds the effective electro-motive force as registered by thermal or magnetic voltmeters—the rule in question is perhaps a useful one, allowing as it does for this margin of possible danger.—ED. L.

AN APPEAL.

To the Editors of THE LANCET.

SIRS,—At the last Liverpool Assizes an action for damages was brought against a medical practitioner in Wigan (Baucher *v.* Wright) for alleged negligence in the performance of his duties as club surgeon. The plaintiff received a severely contused wound of the hand, to which the defendant gave particular attention with a good result. Owing to an opinion that the metacarpal bone had been broken and that the fracture had not been discovered by the defendant the plaintiff entered an action claiming £250 damages. The verdict of the jury without leaving the box was for the defendant; but as the plaintiff is unable to pay the defendant's costs, which amount to nearly £150, a committee has been appointed with the object of raising this amount. Of course, it is to be regretted that the defendant did not belong to a medical defence union, but as he has successfully defended an action which should never have been brought we trust an appeal to his professional brethren will not be in vain. The committee—Mr. C. M. Brady (chairman), Mr. C. R. Graham, and Dr. Benson, and myself as secretary—will be pleased to receive any subscriptions and also will be grateful if you will kindly insert this appeal in an early issue of your valuable journal.

I am, Sirs, yours faithfully,

Wigan, May 4th, 1896. WM. BERRY.

The following subscriptions have been promised or received:—

	£	s.	d.
Mr. F. A. Southam	5	5	0
Mr. Robert Jones	5	5	0
Mr. Wm. Berry	2	2	0
Dr. R. P. White...	2	2	0
Mr. T. Anglor	2	2	0
Mr. Brady (Wigan)	1	1	0
Mr. Street (Haydock Lodge)	1	1	0
Dr. Wolstenholme (Pemberton)	1	1	0
Mr. Graham (Wigan) ...	1	1	0
Dr. Harris, J.P. (Chorley)	1	1	0
Mr. Monks (Wigan)	1	1	0
Mr. Beaman (Southport)	1	1	0
Mr. France (Wigan)... ...	1	1	0
Mr. Litherland (Pemberton)	1	1	0
Dr. F. R. Mallett (Bolton)	1	1	0
Mr. Neville (Wigan)... ...	1	0	0
Dr. Benson (Wigan)... ...	0	10	6
Dr. Howe (Whitehouses)	0	10	6
Dr. Unsworth (Blackrod)	0	10	0
Dr. Doman (Westhoughton)	0	5	0
Mr. Tyndall (Westhoughton)	0	5	0
Dr. J. A. Rigby (Preston)	0	5	0
Dr. Brazil (Bolton)	0	5	0

THE RELIABILITY OF CLINICAL THERMOMETERS.

To the Editors of THE LANCET.

SIRS,—I was informed some time ago by the head partner of a firm of surgical instrument makers that clinical thermometers altered after two years, as a rule—viz., registered higher than they ought to do. I stupidly omitted to ask him if this applied to all thermometers, or only to those in constant use. Can you give me any information on the subject? If not, will you kindly submit the question to the readers of THE LANCET, as the subject is an important one?

I am, Sirs, faithfully yours,

Mediterranean, April 22nd, 1896. R.N.

*** All clinical thermometers are liable to read somewhat high after having the scale divided about two years, if the graduation has been made as soon as the instrument was constructed. Use has nothing to do with this, or at any rate nothing worth mentioning: the reason is that the bore of the unseasoned tube is liable to slightly contract. Messrs. Down Bros. guarantee that in none of their well-seasoned tubes will any change take place, not to the extent of one-fifth of a degree in five years. Messrs. Arnold and Sons inform us that they do not mark any tubes for graduation which have not been manufactured at least two years.—ED. L.

THE ARMY MEDICAL STAFF.

To the Editors of THE LANCET.

SIRS,—I know you have the interests of the Army Medical Staff at heart, and I therefore ask you to insert a short letter from one who, as a medical officer of over thirty years' service, must be fairly well informed on the subject on which he is writing. In the first place, I cannot imagine why army surgeons are supposed to be such very ignorant practitioners. In the Ashanti campaign of 1873 and of 1896 they proved themselves exceptionally able; in all the wars of the last forty years they have shown themselves to be not only good officers but also good medical men; in peace time the results of practice in military hospitals are, I am quite certain, as successful as in civil hospitals, and I am equally certain that the medical treatment soldiers receive in the army leaves little to complain of. Military surgeons are certainly not specialists in certain affections peculiar to women—it is quite out of their line, and always will be; neither are they the equals of the leading hospital surgeons, nor will they ever be, for they have not the enormous practice and experience these men have. We have, of course, duffers among us, and I need hardly say there are duffers in the civil community. We military surgeons who are behind the scenes know well what errors in diagnosis and feebleness of treatment frequently meet our view in civil life. I do not myself believe that discontent exists to any degree among our patients, though I am well aware that medical advice which can be obtained for nothing is very lightly valued by all classes, and I quite agree with you that it is neither fair to the patient nor to his surgeon that the latter should be frequently changed while in charge of a ward. Some changes in military service are absolutely necessary.

Now, with regard to military titles, we are not in the least ashamed of the title of "Doctor," nor are we in the least degree anxious to be taken for combatant officers; but as we lead an entirely military life, accompanying the soldier in all his campaigns, sharing to the full his hardships and dangers—for however big or small the expedition may be if it involves a risk to the soldier there is found the army surgeon ready at hand to afford help in case of trouble—we are military men in every sense of the word, though not combatant officers, and naturally desire to possess military titles, which show, not to military men only, but also to civilians with whom we associate, what rank we have earned and hold in the army. Such titles as were formerly in use do not convey this information, nor were they ever used except officially. A surgeon of one month's service and an inspector-general of thirty-five years' active service were both addressed simply as "Doctor." We object to this.

Now, in conclusion I should like to state my conviction as to the present unpopularity of the service. We are satisfied with our pay, our retirement, and rank, but the medical profession is disgusted with the abuse, the continual endeavour to degrade instead of elevate the medical service and to make its members ashamed instead of proud of it. In the service journals ridiculous and impossible yarns are fathered on medical officers such as could never have had any foundation in fact, but yet serve the purpose of raising a laugh at the service. These are the reasons why young practitioners will not come forward. Is the prospect enticing? The pay may be increased, that most questionable suggestion of short service may be adopted (the certainty of provision for life is really the only attraction the medical service has to offer), and any possible expedient may be tried, but until it becomes a career carrying with it not only all the hardships and dangers of military life, but also some of its prestige, competitors of a desirable class for commissions in the Army Medical Staff will never be obtained. The marvel to me is that, in spite of the treatment this branch of the service has for years received, medical officers can be found willing to throw away their lives cheerfully at the call of duty. I wonder if our opponents are aware that the fact was elicited at a Royal

Commission which inquired into these matters some few years ago—and whose suggestions by-the-bye, as they were favourable to the medical men, were never carried out—that the mortality among army surgeons was nearly double that of combatant officers? I do not think young medical men fear death as much as most other people, yet this can hardly be considered an additional inducement to enter an unpopular service. I am quite convinced that the endeavour to deprive army surgeons of their military rank earned by hard service in the field and to make them, as General Buller expressed it in his recent speech at Netley, merely an annexe to the army is at the bottom of the prevalent discontent, and until this is removed we shall never get good men to join the ranks of the Army Medical Staff.

I am, Sirs, yours faithfully,

April 17th, 1896. BRIGADE-SURGEON, A.M.S.

THE BATTLE OF THE CLUBS.—XXIX.[1]

(FROM OUR SPECIAL COMMISSIONER.)

(*Continued from p. 1171.*)

SHEFFIELD: AN ANCIENT MEDICAL SOCIETY.—WORKMEN SWEATERS.—THE OLD GRIEVANCES.—PROBABLE FORMATION OF A MEDICAL UNION.

THE medical profession at Sheffield should encounter but little difficulty in forming a strong medical union to deal with ethical and economical questions. For social and scientific purposes the profession has already been united, and this for many years. There is still a minute-book extant which describes the fourteenth annual meeting of the Medico-Chirurgical Society of Sheffield held on Oct. 12th, 1848, so that the society was evidently founded so far back as the year 1834. The very age, however, of the society renders it more than usually difficult to depart from its customs and habits. Consequently it has very generally been decided that instead of extending the programme of the old organisation a new society must be created, but such an effort cannot be successful unless the old society lends active assistance. The Sheffield Medico-Chirurgical Society now numbers from 170 to 180 members and it may be said that almost every respectable practitioner in the town and neighbourhood belongs to this organisation; indeed, it would be difficult to find a town where the profession is so thoroughly united. Unfortunately this union has only been useful in promoting social intercourse, in fostering a friendly feeling between the members of the profession and in facilitating their medical researches and studies. Nothing has been done in the defence of their material interests. Yet we find here in Sheffield, as in other centres, the same complaint; the same exploitation of medical men by friendly societies and assurance companies as described with regard to other towns. Thus one of the first practitioners on whom I called related to me that he had recently sent to one of his patients, who lived at some distance from his surgery, a bill for £5 for medical attendance. A little time afterwards he received a letter from a life insurance company. The canvasser of this company had without any authority whatsoever given the name of my informant as the general medical attendant of the company, and the company now wrote to say that they thought three guineas would be an ample remuneration for the services rendered. Of course the medical practitioner protested that he knew nothing about the insurance company in question and could not admit that they had any right to interfere in his affairs; but his patient was at once surprised and disappointed to find that though he had insured his life he would have to pay the usual medical fees. Other men might have consented to the reduction in the hope that the insurance company would send them other patients, and have thus helped to bring about a general reduction in the fees usually given for medical services. It is a serious matter if canvassers of insurance companies are going to make use of the names of medical men without informing them of the fact and obtaining their authorisation.

Several of the friendly societies at Sheffield have formed an amalgamation and opened a dispensary of their own, where they used to employ a medical officer at, I believe, a salary of £200 a year. But the work gave rise to so many disputes that the medical officer left them, took away a number of their members, and started in private practice on his own account. His successors received a smaller salary, but they were allowed to engage in private practice. Nevertheless other disputes arose. Abuses are of course frequent. Thus a family who for several years had paid the usual 2*s.* 6*d.* per visit joined the Druids and now only pay 3*s.* a year. Practitioners who are officers of friendly societies often experience unpleasant surprises. One of these medical officers related to me that he had been called out to see a tradesman. For some considerable time he had to pay two visits per day. A consultant was called in to whom the tradesman gave a guinea fee. Then it appeared that the tradesman belonged to a friendly society and had recently caused his name to be transferred from the list of his usual attendant to the list of the medical officer who had been attending him so assiduously twice a day. Instead of about 5*s.* a day, which the tradesman could well afford to pay, my informant was destined to receive only 3*s.* a year. On another occasion he was called in to see a man who certainly had started in business in a very small way, but had prospered and now drove into town in his own carriage. When this patient died he left about £80,000. At first the medical officer treated this wealthy individual as if he was a private patient. Then he heard that he was a member of a club and did not propose to give any fees whatsoever. As medical officer of the club in question the medical man was obliged to continue the treatment, but he thought that, under the circumstances, he need not take the trouble of wrapping up the medicine bottles in paper. This it appears greatly offended the patient, who consequently did not come for any more consultations. Here, then, was a man possessing some £80,000 who was quite contented to go on paying only 3*s.* a year for medical attendance and yet was offended because he was treated like workmen and the poor people who alone have a right to demand medical attendance at such reduced rates.

One great difficulty in Sheffield arises out of the prevalence of the sweating system. In the cutlery trade foremen and other workmen contract for a certain amount of work. They only do a portion of this work themselves and give the rest out to other workers, charging them a commission for the work provided. It thus occurs that this sub-contractor or sweater often makes five and six times more out of the commissions he sweats out of the workers under him than he obtains for the work he does with his own hands. Apparently he is an artisan able to earn, perhaps, 30*s.* or 40*s.* a week by his work, and as such gains admittance as a member of a friendly society and claims medical aid when he is ill. But a case was pointed out to me of an artisan who, apart from his normal wages, secured in commissions £20 a week. These men dress as workmen, live in workmen's cottages, are apparently poor, hard-working men, but they drink champagne with their lunch. How can a wage limit be applied to this class? They are careful to conceal what they earn in the form of commissions. One such "workman" was pointed out to me who possessed £1000 in cash and had bought a considerable amount of house property. He was a member of a friendly society and would be very indignant indeed if it were suggested that he, "a poor working man," should pay the usual medical fees. He might live in a workman's cottage and wear cheap workmen's

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current of the same effective voltage. It is true that the regulation which limits the low-pressure alternating current-supply to 250 volts and allows 500 volts for continuous current seems to imply that the former is the more dangerous. If the Board of Trade really hold this view the grounds upon which it is based have not, so far as we are aware, ever been made public. It may be that the idea is simply a survival of an opinion founded on certain "classic" experiments of Sir W. Siemens made in the days of comparatively crude machines; and, inasmuch as there may still exist in actual work certain alternators giving a very "peaked curve"—that is to say, whose maximum electro-motive force greatly exceeds the effective electro-motive force as registered by thermal or magnetic voltmeters—the rule in question is perhaps a useful one, allowing as it does for this margin of possible danger.—ED. L.

AN APPEAL.

To the Editors of THE LANCET.

SIRS,—At the last Liverpool Assizes an action for damages was brought against a medical practitioner in Wigan (Baucher *v.* Wright) for alleged negligence in the performance of his duties as club surgeon. The plaintiff received a severely contused wound of the hand, to which the defendant gave particular attention with a good result. Owing to an opinion that the metacarpal bone had been broken and that the fracture had not been discovered by the defendant the plaintiff entered an action claiming £250 damages. The verdict of the jury without leaving the box was for the defendant; but as the plaintiff is unable to pay the defendant's costs, which amount to nearly £150, a committee has been appointed with the object of raising this amount. Of course, it is to be regretted that the defendant did not belong to a medical defence union, but as he has successfully defended an action which should never have been brought we trust an appeal to his professional brethren will not be in vain. The committee—Mr. C. M. Brady (chairman), Mr. C. R. Graham, and Dr. Benson, and myself as secretary—will be pleased to receive any subscriptions and also will be grateful if you will kindly insert this appeal in an early issue of your valuable journal.

I am, Sirs, yours faithfully,

Wigan, May 4th, 1896. WM. BERRY.

The following subscriptions have been promised or received:—

	£	s.	d.
Mr. F. A. Southam	5	5	0
Mr. Robert Jones	5	5	0
Mr. Wm. Berry	2	2	0
Dr. R. P. White...	2	2	0
Mr. T. Anglor	2	2	0
Mr. Brady (Wigan)	1	1	0
Mr. Street (Haydock Lodge)	1	1	0
Dr. Wolstenholme (Pemberton)	1	1	0
Mr. Graham (Wigan) ...	1	1	0
Dr. Harris, J.P. (Chorley)	1	1	0
Mr. Monks (Wigan)	1	1	0
Mr. Beaman (Southport)	1	1	0
Mr. France (Wigan)... ...	1	1	0
Mr. Litherland (Pemberton)	1	1	0
Dr. F. R. Mallett (Bolton)	1	1	0
Mr. Neville (Wigan)... ...	1	0	0
Dr. Benson (Wigan)... ...	0	10	6
Dr. Howe (Whitehouses)	0	10	6
Dr. Unsworth (Blackrod)	0	10	0
Dr. Doman (Westhoughton)	0	5	0
Mr. Tyndall (Westhoughton)	0	5	0
Dr. J. A. Rigby (Preston)	0	5	0
Dr. Brazil (Bolton)	0	5	0

THE RELIABILITY OF CLINICAL THERMOMETERS.

To the Editors of THE LANCET.

SIRS,—I was informed some time ago by the head partner of a firm of surgical instrument makers that clinical thermometers altered after two years, as a rule—viz., registered higher than they ought to do. I stupidly omitted to ask him if this applied to all thermometers, or only to those in constant use. Can you give me any information on the subject? If not, will you kindly submit the question to the readers of THE LANCET, as the subject is an important one?

I am, Sirs, faithfully yours,

Mediterranean, April 22nd, 1896. R.N.

*** All clinical thermometers are liable to read somewhat high after having the scale divided about two years, if the graduation has been made as soon as the instrument was constructed. Use has nothing to do with this, or at any rate nothing worth mentioning: the reason is that the bore of the unseasoned tube is liable to slightly contract. Messrs. Down Bros. guarantee that in none of their well-seasoned tubes will any change take place, not to the extent of one-fifth of a degree in five years. Messrs. Arnold and Sons inform us that they do not mark any tubes for graduation which have not been manufactured at least two years.—ED. L.

THE ARMY MEDICAL STAFF.

To the Editors of THE LANCET.

SIRS,—I know you have the interests of the Army Medical Staff at heart, and I therefore ask you to insert a short letter from one who, as a medical officer of over thirty years' service, must be fairly well informed on the subject on which he is writing. In the first place, I cannot imagine why army surgeons are supposed to be such very ignorant practitioners. In the Ashanti campaign of 1873 and of 1896 they proved themselves exceptionally able; in all the wars of the last forty years they have shown themselves to be not only good officers but also good medical men; in peace time the results of practice in military hospitals are, I am quite certain, as successful as in civil hospitals, and I am equally certain that the medical treatment soldiers receive in the army leaves little to complain of. Military surgeons are certainly not specialists in certain affections peculiar to women—it is quite out of their line, and always will be; neither are they the equals of the leading hospital surgeons, nor will they ever be, for they have not the enormous practice and experience these men have. We have, of course, duffers among us, and I need hardly say there are duffers in the civil community. We military surgeons who are behind the scenes know well what errors in diagnosis and feebleness of treatment frequently meet our view in civil life. I do not myself believe that discontent exists to any degree among our patients, though I am well aware that medical advice which can be obtained for nothing is very lightly valued by all classes, and I quite agree with you that it is neither fair to the patient nor to his surgeon that the latter should be frequently changed while in charge of a ward. Some changes in military service are absolutely necessary.

Now, with regard to military titles, we are not in the least ashamed of the title of "Doctor," nor are we in the least degree anxious to be taken for combatant officers; but as we lead an entirely military life, accompanying the soldier in all his campaigns, sharing to the full his hardships and dangers—for however big or small the expedition may be if it involves a risk to the soldier there is found the army surgeon ready at hand to afford help in case of trouble—we are military men in every sense of the word, though not combatant officers, and naturally desire to possess military titles, which show, not to military men only, but also to civilians with whom we associate, what rank we have earned and hold in the army. Such titles as were formerly in use do not convey this information, nor were they ever used except officially. A surgeon of one month's service and an inspector-general of thirty-five years' active service were both addressed simply as "Doctor." We object to this.

Now, in conclusion I should like to state my conviction as to the present unpopularity of the service. We are satisfied with our pay, our retirement, and rank, but the medical profession is disgusted with the abuse, the continual endeavour to degrade instead of elevate the medical service and to make its members ashamed instead of proud of it. In the service journals ridiculous and impossible yarns are fathered on medical officers such as could never have had any foundation in fact, but yet serve the purpose of raising a laugh at the service. These are the reasons why young practitioners will not come forward. Is the prospect enticing? The pay may be increased, that most questionable suggestion of short service may be adopted (the certainty of provision for life is really the only attraction the medical service has to offer), and any possible expedient may be tried, but until it becomes a career carrying with it not only all the hardships and dangers of military life, but also some of its prestige, competitors of a desirable class for commissions in the Army Medical Staff will never be obtained. The marvel to me is that, in spite of the treatment this branch of the service has for years received, medical officers can be found willing to throw away their lives cheerfully at the call of duty. I wonder if our opponents are aware that the fact was elicited at a Royal

Commission which inquired into these matters some few years ago—and whose suggestions by-the-bye, as they were favourable to the medical men, were never carried out—that the mortality among army surgeons was nearly double that of combatant officers? I do not think young medical men fear death as much as most other people, yet this can hardly be considered an additional inducement to enter an unpopular service. I am quite convinced that the endeavour to deprive army surgeons of their military rank earned by hard service in the field and to make them, as General Buller expressed it in his recent speech at Netley, merely an annexe to the army is at the bottom of the prevalent discontent, and until this is removed we shall never get good men to join the ranks of the Army Medical Staff.

I am, Sirs, yours faithfully,

April 17th, 1896. BRIGADE-SURGEON, A.M.S.

THE BATTLE OF THE CLUBS.—XXIX.[1]

(FROM OUR SPECIAL COMMISSIONER.)

(*Continued from p. 1171.*)

SHEFFIELD: AN ANCIENT MEDICAL SOCIETY.—WORKMEN SWEATERS.—THE OLD GRIEVANCES.—PROBABLE FORMATION OF A MEDICAL UNION.

THE medical profession at Sheffield should encounter but little difficulty in forming a strong medical union to deal with ethical and economical questions. For social and scientific purposes the profession has already been united, and this for many years. There is still a minute-book extant which describes the fourteenth annual meeting of the Medico-Chirurgical Society of Sheffield held on Oct. 12th, 1848, so that the society was evidently founded so far back as the year 1834. The very age, however, of the society renders it more than usually difficult to depart from its customs and habits. Consequently it has very generally been decided that instead of extending the programme of the old organisation a new society must be created, but such an effort cannot be successful unless the old society lends active assistance. The Sheffield Medico-Chirurgical Society now numbers from 170 to 180 members and it may be said that almost every respectable practitioner in the town and neighbourhood belongs to this organisation; indeed, it would be difficult to find a town where the profession is so thoroughly united. Unfortunately this union has only been useful in promoting social intercourse, in fostering a friendly feeling between the members of the profession and in facilitating their medical researches and studies. Nothing has been done in the defence of their material interests. Yet we find here in Sheffield, as in other centres, the same complaint; the same exploitation of medical men by friendly societies and assurance companies as described with regard to other towns. Thus one of the first practitioners on whom I called related to me that he had recently sent to one of his patients, who lived at some distance from his surgery, a bill for £5 for medical attendance. A little time afterwards he received a letter from a life insurance company. The canvasser of this company had without any authority whatsoever given the name of my informant as the general medical attendant of the company, and the company now wrote to say that they thought three guineas would be an ample remuneration for the services rendered. Of course the medical practitioner protested that he knew nothing about the insurance company in question and could not admit that they had any right to interfere in his affairs; but his patient was at once surprised and disappointed to find that though he had insured his life he would have to pay the usual medical fees. Other men might have consented to the reduction in the hope that the insurance company would send them other patients, and have thus helped to bring about a general reduction in the fees usually given for medical services. It is a serious matter if canvassers of insurance companies are going to make use of the names of medical men without informing them of the fact and obtaining their authorisation.

Several of the friendly societies at Sheffield have formed an amalgamation and opened a dispensary of their own, where they used to employ a medical officer at, I believe, a salary of £200 a year. But the work gave rise to so many disputes that the medical officer left them, took away a number of their members, and started in private practice on his own account. His successors received a smaller salary, but they were allowed to engage in private practice. Nevertheless other disputes arose. Abuses are of course frequent. Thus a family who for several years had paid the usual 2*s.* 6*d.* per visit joined the Druids and now only pay 3*s.* a year. Practitioners who are officers of friendly societies often experience unpleasant surprises. One of these medical officers related to me that he had been called out to see a tradesman. For some considerable time he had to pay two visits per day. A consultant was called in to whom the tradesman gave a guinea fee. Then it appeared that the tradesman belonged to a friendly society and had recently caused his name to be transferred from the list of his usual attendant to the list of the medical officer who had been attending him so assiduously twice a day. Instead of about 5*s.* a day, which the tradesman could well afford to pay, my informant was destined to receive only 3*s.* a year. On another occasion he was called in to see a man who certainly had started in business in a very small way, but had prospered and now drove into town in his own carriage. When this patient died he left about £80,000. At first the medical officer treated this wealthy individual as if he was a private patient. Then he heard that he was a member of a club and did not propose to give any fees whatsoever. As medical officer of the club in question the medical man was obliged to continue the treatment, but he thought that, under the circumstances, he need not take the trouble of wrapping up the medicine bottles in paper. This it appears greatly offended the patient, who consequently did not come for any more consultations. Here, then, was a man possessing some £80,000 who was quite contented to go on paying only 3*s.* a year for medical attendance and yet was offended because he was treated like workmen and the poor people who alone have a right to demand medical attendance at such reduced rates.

One great difficulty in Sheffield arises out of the prevalence of the sweating system. In the cutlery trade foremen and other workmen contract for a certain amount of work. They only do a portion of this work themselves and give the rest out to other workers, charging them a commission for the work provided. It thus occurs that this sub-contractor or sweater often makes five and six times more out of the commissions he sweats out of the workers under him than he obtains for the work he does with his own hands. Apparently he is an artisan able to earn, perhaps, 30*s.* or 40*s.* a week by his work, and as such gains admittance as a member of a friendly society and claims medical aid when he is ill. But a case was pointed out to me of an artisan who, apart from his normal wages, secured in commissions £20 a week. These men dress as workmen, live in workmen's cottages, are apparently poor, hard-working men, but they drink champagne with their lunch. How can a wage limit be applied to this class? They are careful to conceal what they earn in the form of commissions. One such "workman" was pointed out to me who possessed £1000 in cash and had bought a considerable amount of house property. He was a member of a friendly society and would be very indignant indeed if it were suggested that he, "a poor working man," should pay the usual medical fees. He might live in a workman's cottage and wear cheap workmen's

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clothes, but his medical attendant, though not nearly so wealthy, was compelled to live in an expensive villa, keep a carriage, and wear a frock-coat and tall hat. This wealthy working man would have thought himself badly used if his club medical attendant had come to see him on foot and had been shabbily dressed. He would not have had confidence, and would probably hesitate to take the medicine sent. Several members of the friendly societies are tradesmen, and this is notably the case with regard to the Druids, one of the latter being a cab proprietor. Even the secretaries of the clubs are beginning to see that the pay given to the medical officers is insufficient, and, to judge from the remarks made, some slight increase might be obtained from several of the societies; but the necessity of imposing a wage limit is far more important.

Several practitioners complained of the habit very prevalent at Sheffield of changing medical men. During the healthy and active part of a man's life he will live near to his work, and but rarely requires the services of his club medical officer. But when he becomes old and his health begins to give way he will probably go and live in the outskirts of the town, and then will want to have his name transferred to the list of some other officer living nearer his new abode. Thus some club medical officers get an altogether unfair proportion of invalid members on their list. It has been urged that when a member of a club wants to make this change he should be examined by the new medical attendant and accepted by the latter only if he is in a healthy condition. This suggestion is perhaps not very practical, for it would place members of the clubs at a very great disadvantage when they want to remove. Still, from the practitioner's point of view it does not seem fair that one medical officer should have the majority of his club members aged from twenty to fifty years, while in a suburban district there should be an extraordinary proportion of club members who are more than fifty years old. It is very certain that the suburban practitioner will have much more work to do for the same pay, and this will be spread over a much larger space. In the present state of affairs it is difficult to see how this problem can be solved satisfactorily for both parties, but the grievance would disappear naturally and without effort if a wage limit was established. Those club members who are able in more advanced years to remove from the centre of the town to the suburbs are in many instances members whose financial circumstances have so improved that the application of a wage limit would remove them altogether from club practice. They would go to increase the private practice of suburban medical men. This would be so advantageous to the suburban practitioners as to constitute an ample compensation for the few club members who, though removing to the suburbs, might still be so poor as to justify their remaining in their clubs.

To deal with these questions a medical union must be formed at Sheffield. The profession needs protection against the touting extensively organised by the life assurance companies. Then the medical men who accept fees of 6*d.* and 1*s.* constitute also a great grievance.

Such methods of practice will, however, under the stress of competition continue and increase if a strong medical union is not formed to deal with all such questions. Some efforts have already been made to constitute such a union. The Sheffield Medico-Chirurgical Society has been asked to take the initiative and convoke a meeting so as to form a union. The reply was that every possible help would be given, but that the club medical officers and those who were themselves the principal sufferers should take the initiative in convoking the meeting; the leaders of the profession were, however, ready to associate themselves with the movement, to speak at the meeting, and in any other way help the cause forward. It may be said, therefore, that there is a general awakening at Sheffield and that the time is not far distant when this town will join with its neighbours in seeking to constitute a local union.

THE BATTLE OF THE CLUBS AT LINCOLN.

IN THE LANCET of April 4th we published a resolution and scale of fees which had been adopted by the profession in Lincoln as those which ought to rule in medical clubs. This document was duly forwarded to the two medical institutes. Replies have been received as follows:—

(1)

Oddfellows' Medical Institute, Unity-square, Lincoln,
April 11th, 1896.

DEAR SIR,—I am directed by the committee of the above Institute to forward you copy of resolution passed by them at a special meeting held last night.

Yours truly,
WM. COULSON, Secretary.

"This committee, having received a letter from the medical practitioners of Lincoln containing certain resolutions which they assert should be the future condition of membership of this institution, resolved—'That we hereby refuse either to accept the conditions or to recognise their right to dictate them.'"

(2)

Lincoln United Friendly Societies Dispensary,
April 17th, 1896.

DEAR SIR,—I am requested to forward to you the following resolution which was passed by the delegates of the two Medical Aid Associations of Lincoln at their meeting last evening.—Yours truly,
WM. BAVIN.

Resolved: "That this meeting, having considered the character and effect of the resolutions therein, hereby declares its inability to recognise in any way the manifesto of the medical men of Lincoln or any outside pressure attempted to be put upon the committee of Friendly Societies."

It will be noted that Messrs. Coulson and Bavin do not err upon the side of courtesy. As a consequence of these replies the following letter of resignation was sent in and signed by three of the four medical men attached to the institutions in question:—

LETTER OF RESIGNATION.

We regret your refusal to accept the principles put forward in the resolutions passed at the meeting of practitioners held on March 30th last.

Under these circumstances we are pledged to tender our resignation, which we beg you to accept for this day month, unless in the meanwhile you should agree to alterations on those lines which have been submitted to you.

April 22nd, 1896.

It will be noticed that we say this letter was signed by three out of four medical men. The fourth, although his name appears in the manifesto published in our columns of April 4th; although he signed an agreement dated March 28th pledging himself to act in unity with his colleagues; although he denied at a meeting held upon April 11th that he was not acting in unity with his professional brethren, and although he expressed no ill-will towards the gentlemen who had questioned his position but shook hands with him—yet, in face of all this, he has declined to send in his resignation with the others. He still holds his post. We hope that Mr. P. W. Young will see the curious position in which he stands—that of a nominal friend and virtual foe. We appeal to him to fall into line with his colleagues. His present course will do him no good whatever, though it may temporarily impede the course of justice to his professional brethren.

We congratulate the three medical men on their very proper stand against the arbitrary conduct of the medical institutes. They have acted for the good of the profession.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

Manchester and Salford Sewage.

THE adjourned case of the Mersey and Irwell Joint Committee against the Salford corporation for polluting the Ship Canal came before the Salford County-court on the 20th ult. The counsel for the corporation said the system for treating the sewage had been decided on, and application had been made to the Local Government Board to borrow £50,000 to carry out the works and to hold an inquiry at the earliest possible date in order that the necessary sanction may be obtained, so that the work proposed may be begun without delay. The case was adjourned till the result of the application to the Local Government Board—a body not always very speedy in its proceedings—was known. At the meeting of the Joint Committee yesterday Mr. R. A. Tatton, the chief inspector, reported as regards the treatment of Manchester sewage that since the last adjournment thirty acres of land have been brought into operation as a filtration area, but the amount of sewage dealt with by this area is only about 2,000,000 gallons per day out of a total dry weather flow of 14,000,000 gallons, the remainder being treated by precipitation only. It is expected that "the whole of the sewage will be connected up towards the end of the summer of this year." Sir Henry Roscoe, speaking after a report respecting certain analyses of effluents had been read, stated that experience showed that mere chemical precipitation—whether at such works as those of fellmongers, breweries, tanneries, or in the case of the sewage of a large town—would not do, and they must have either land filtration or artificial filtration.

He was glad to find that the chemical sub-committee had appointed a deputation to interview a number of fellmongers with regard to the serious pollution arising from their works, and to consider and advise as to the most satisfactory methods of dealing with the effluents from these places. A member of the committee said the condition of the Irwell had considerably improved, and Alderman Hopkinson was told that fish were coming up the Ship Canal as far as Latchford.

Special Treatment for Aged Poor.

The Manchester board of guardians deserve credit for endeavouring to treat those in their charge with humanity and discrimination. At the meeting a fortnight since Alderman McDougall moved a resolution to the effect that a committee should "consider and report as to the desirability and method of providing special accommodation and treatment for deserving aged persons; that until the method is decided upon and has been in operation for some time the selection should be made from inmates of the Crumpsall Workhouse; and that in considering such arrangements ordinary clothes should be provided and, if possible, periods of daily liberty be granted." The wording seems a little involved, but the intention is obvious, and if properly safeguarded the scheme would do much to brighten the closing days of many whose lines have been none too prosperous.

Hospital Saturday.

In a letter to the local papers Mr. Fred. Scott, the secretary to the Manchester Hospital Sunday and Saturday Fund and the Red Cross Society, corrects an impression likely to have an injurious effect. A delegate from a local town stated that in his district it was thought that the collections benefited only one or two of the principal hospitals in Manchester and Salford. Instead of this being the case "no less than twenty-one hospitals and other medical charities share in the proceeds of these collections, including hospitals for the treatment of special complaints, such as the Royal Eye Hospital, the Hospitals for Consumption and Skin Diseases, the Ear Institution, St. Mary's, Southern and Clinical Hospitals, the Cancer Pavilion, and other institutions at which large numbers of patients from surrounding towns are treated as freely as residents in Manchester and Salford." He appeals, therefore, to those living in the numerous towns in the surrounding district to support Manchester and Salford hospitals. The Red Cross Society is the working men's auxiliary to the Hospital Saturday and Sunday Fund. It has taken up the work of increasing the funds of the medical charities enthusiastically and hopes to effect a large increase in the sum contributed on Hospital Saturday, the arrangements for which day are under the special control of this new organisation.

Dog Muzzling.

For a long time past a good deal of feeling and irritation has been shown in this neighbourhood both by frequent letters to the papers and otherwise with regard to the sometimes apparently arbitrary enforcement of the muzzling order in certain districts, while in adjoining districts the dogs run free. If the muzzling were efficient, if it were carried out over the whole island for a period long enough to cover any possible length of incubation, and if the importation of dogs were absolutely prevented, there would be some compliance with common-sense requirements. But with the various ingenious devices adopted by many owners for preventing the efficiency of the muzzle and the frequent accident of the muzzle getting loose protection cannot always be relied upon. This partial enforcement is obviously irrational, for a mad dog often travels far and does not respect artificial boundaries, and it is no doubt felt to be so both by the muzzled and the unmuzzled dog when these sensible creatures meet on the imaginary line dividing the districts, the one to complain to, and the other to commiserate with, his friend. In a report of the Watch Committee of the Manchester City Council it is stated that under the muzzling order of February, 1895, 1008 summonses were issued against owners of dogs, 944 of whom were fined and 64 cases discharged. Most of these summonses were for dogs running out into the road unmuzzled, a thing difficult to prevent if they are to be allowed any freedom at all. But apart from the muzzling order an important and valuable work has been carried out systematically by the police in the impounding and destruction of ownerless and worthless dogs and the preservation and restoration of lost dogs to their owners. During last year 3331 stray dogs were brought by the police to the city pound and 598 by the owners. Of this total of 3929 219 were claimed, 253 were sold, 3439 were drowned, and 18 were waiting events. In January and February of this year 168 were brought by their owners to be destroyed for old age, disease, or savage and uncertain temper, and altogether more than 500 were impounded. There is usually a greater demand for the purchase of good dogs at the pound than can be met. They are sold at 2*s.* 6*d.* each, the purchaser giving an undertaking to restore to the owner, if required, on payment of the purchaser's expenses. The Watch Committee, after considering the subject, recommend: "(1) That the muzzling of dogs should be continued, subject to its being relaxed or dispensed with in the case of a dog which wears a collar with the owner's name and address and an official tablet, and is registered at one of the divisional police-stations; (2) that the existing muzzling order should be amended accordingly; (3) that the existing exemption in favour of sporting dogs be removed; (4) that all dogs be muzzled which are not registered and do not wear name-collars and tablets; and (5) that all dogs which do not comply with the regulation shall be destroyed or sold if not claimed within three days where the owner is not known, or within two, after notice, where the owner is known." There may be some difficulty about No. 3, and No. 5 implies a freedom of volition and throws on the dog a responsibility which the Watch Committee in its wisdom perhaps scarcely intended. If, however, this system of registration and supervision were universally carried out, and all stray dogs were impounded and, if need be, destroyed, cases of rabies would be less frequent and sooner detected, with a corresponding increase in the protection of the people against a frightful danger.

May 5th.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Convocation of the University of Durham at Newcastle-upon-Tyne.

A CONVOCATION of the University of Durham was held in Newcastle-upon-Tyne on Saturday, April 25th. The ceremony took place in the library of the College of Medicine, and the Warden of the University, Dean Kitchen, presided. Honorary degrees were conferred upon the Lord Bishop of Newcastle, Dean Lukins Baronian, the Rev. Dr. Dallinger, Professor Arnison, Principal Gurney, Mr. Richard Howse, and Sir David Dale, Bart. Dr. David B. Lees, of St. Mary's Hospital, London, was admitted *ad eundem* M.D., and the Vicar of Newcastle, the Rev. Canon Lister, and the Rev. Canon Pennyfather *ad eundem* M.A. Some fifty ordinary degrees in medicine and surgery were also conferred. Great public interest was taken in this the first convocation held in Newcastle-upon-Tyne. The mayor and corporation attended in state and the large room was crowded with spectators. The undergraduates were, as usual, very much in evidence. The day was beautifully fine and the proceedings—owing in no small degree to the energy of Professor R. Howden, who is practically the dean of the Medical Faculty—passed off most satisfactorily.

The Bishop of Newcastle.

The Bishop of Newcastle preached last Sunday in the chapel of the Royal Infirmary to the inmates of the institution. Dr. Jacobs has not been long in the north, but he has on many occasions already shown his sympathy with the medical profession and the work of the medical charities of the city. He took a very active interest in the management of the hospital at Portsmouth, and it is to be hoped an opportunity will soon be afforded him of becoming connected with the Royal Infirmary here.

Typhoid Fever from Eating Raw Mussels.

In the River Blyth there are mussel-beds which supply a cheap and much-appreciated luxury to the poorer inhabitants of the populous town of Blyth. Unfortunately, close to them several sewers discharge their contents into the river. The medical officers of Bedlington and Cowpen report that the eating of mussels from these beds is a possible source of typhoid fever in the neighbourhood and the Board of Trade was approached upon the subject. Thence it was referred to the Sea Fisheries Committee for Northumberland and dismissed without remark. The Blyth port sanitary authority, on the

advice of its medical officer, who was of opinion no infection could arise on account of the process to which the sewage was subjected, will take no action. Mr. Laing, in his annual report to the Cowpen council, declares emphatically that he has traced some of the cases of typhoid fever to the eating of uncooked mussels and urges the destruction of the mussel beds. Mr. Laing's statement deserves careful consideration and ought to be thoroughly considered and the issue should be determined. It should not be a matter of indifference as to whether typhoid fever is being spread or not by the eating of mussels rendered unwholesome by sewage.

Stoppage of the Bainton Pits.

Work has now ceased at these pits and the men's gear and the horses have been withdrawn. Notice has been given to the pitmen that they must either pay rent or vacate their houses on May 13th. They profess to think this very hard, and at a recent meeting it was stated by one of them that he believed Lord Londonderry would rather pay six or nine months' rent for them than evict them, though his doing so would cause him to lose another £1000. Last year Lord Londonderry lost some £15,000 by working these collieries. At Seaton Delaval, a pit village in Northumberland, a coöperative store last year made only 15 per cent. and in consequence the wages of the employés have been reduced. The store is owned by workmen, the Bainton pits by a nobleman. We are told that coöperation will solve the difficulties between capital and labour. No one suffers more from the unfortunate disputes between capital and labour than members of the medical profession, who, when a pit is stopped or a strike takes place, have to work without remuneration and are often, if not ruined, seriously crippled for years.

Newcastle-upon-Tyne, May 5th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

The Lay Press and the Midlothian Medical Officer of Health.

THE official reports of a public servant are, of course, open to public criticism, and the reports of medical officers of health need have no exemption claimed for them even from the lay press. It is, however, highly desirable that when the lay press criticises it should do so through a person acquainted with the present state of knowledge on sanitary matters. The neglect of this precaution is detrimental to the public interest, because erroneous views on matters seriously affecting the public health are thereby promulgated or confirmed. The medical officer of health for Midlothian and the adjoining counties, Dr. W. J. Brock, in his annual report refers to several matters of great importance from the public health standpoint. He refers to the inefficiency of the chemical analysis of drinking water and says it is "*practically* of little use" as it is powerless to detect the germs of disease which the water may contain. He also refers to the town refuse traffic being a source of much annoyance and adds: "Although the city refuse is not supposed to contain human excreta a certain amount is always present. It, however, contains dust from the skins of those affected with scarlet fever and dried sputa from the respiratory tracts of those affected with diphtheria, measles, and tuberculosis; and it is not surprising that on its coming to a district there at once is found an unusual number of sore-throats if not one or other of the diseases mentioned. Is it not, too, a very likely means of spreading tubercular disease, not only to man, but to the lower animals?" At another part of his report, in referring to an outbreak of typhoid fever the source of which could not be discovered, he says, "There is a cause always to be thought of—namely, importation of infection through goods, such as aerated waters, greengroceries, &c." All these are propositions accepted by the scientific sanitarian, and it is most desirable that the public mind should be impressed with their accuracy and that the hands of the public health medical officers should be upheld in their endeavours to make them known to local authorities and to the general public. And yet while this is so we regret to see an Edinburgh newspaper, ever active to expose what may interest the public, adversely criticising these statements and making comments upon them which certainly convey to the public the impression that the medical officer of health is wrong and the writer of the article referred to right. The state of the writer's knowledge may be judged by the following: "The best medical, veterinary, and sanitary authorities are agreed that the germs of phthisis do not retain their vitality for many seconds after exposure to air and particularly to sunlight." There might be no objection to the writer of this believing that which he writes, but it is to be regretted that such erroneous doctrines should be thrown broadcast amongst a community. The efforts of sanitarians and physicians to get the public to realise the danger of dried tuberculous sputum is much counteracted by ill-informed statements of this nature in the lay press, and we regret when a newspaper is led by any of its contributors into such a false position as the above quotation indicates. It is out of place here to examine at length the objectionable article, for its value can be estimated by the above quotation. We may, however, add that the statements and views of the medical officer are by no means "remarkable" in the sense meant by his critic, but are the accepted doctrines of enlightened sanitation.

Glasgow Medico-Chirurgical Society.

This society met on the 1st inst., Dr. Walker Downie being in the chair. Dr. T. K. Dalziel showed a child aged three years the subject of Spina Bifida. At three months the tumour was injected with Morton's fluid, and in time its cystic character completely disappeared, leaving a firm, shrunken mass. Evidences of involvement of nerve became increasingly conspicuous. Paralysis of the lower limbs appeared, with loss of control over the bladder and rectum and ulceration extending deeply into each ischio-rectal fossa. It was, therefore, decided to cut down on the tumour with a view to see if the nerves could be freed from pressure. After removing a superficial mass of fibrous and fatty tissue the membranes were opened and the nerve roots were found to be involved in a quantity of cicatricial tissue. To remove this it was necessary to divide the nerve roots in the cauda equina and the divided ends of the roots were afterwards stitched. No ill results followed the operation except a high temperature which lasted only a few hours. For some time no improvement was produced, but latterly the efficiency of the bladder had increased, the ulcers had healed, and there was a favourable movement in respect of the paralysis. Dr. Stirton read a paper on Vaginal *versus* Abdominal Surgery in the treatment of various pelvic conditions. He contended that a number of diseased conditions in which it was the custom to open the abdomen could be far more safely attacked through the vagina, and he quoted in support of his position records from his wards in the Royal Infirmary in which he had successfully treated by puncture from the vagina cases of pyosalpinx, hematocele, extra-uterine pregnancy, and cysts of the broad ligament. The paper led to a somewhat animated discussion, in which Dr. Samuel Sloan, Dr. Edgar, Dr. Renton, and Dr. Rutherfurd took part. The latter questioned very decidedly the wisdom of puncturing a parovarian cyst without subsequent removal of the cyst wall. Dr. T. K. Monro showed photographs illustrating the Value of the Thyroid Treatment in cases of Myxœdema. Dr. Henry Rutherfurd showed two series of photographs illustrating Arrested Development of Bone. In one the arrest of development was due to acute arthritis (epiphysitis) occurring in infancy; in the other it was associated with cartilaginous tumours.

The Antitoxin Treatment of Diphtheria in Glasgow.

In the current number of the *Glasgow Medical Journal* Dr. Ernest L. Marsh publishes an elaborate series of statistical tables showing the influence of the antitoxin treatment on the cases of diphtheria admitted to the City of Glasgow Fever Hospital during 1895. The admissions numbered 179, and of these 137 were treated by antitoxic serum, the remaining 42 being either mild infections (38 cases) or profound toxæmias (4 cases) moribund on admission. The fatal cases numbered 25, giving on the admissions a percentage of 14 deaths. In the five years previous to 1895 the cases of diphtheria had never given a less percentage than 35·5 deaths in any one year, so that the improvement is a very impressive one. Of the 179 patients in 1895 tracheotomy was needed in 29, and of these 10 died, giving a mortality of 34·5 per cent. Dr. Marsh draws special attention to these cases and contrasts the low death-rate with the high mortality of the tracheotomy cases in previous years—viz., 76 2 per cent. (42 cases) in 1893 and 86 9 per

cent. (23 cases) in 1894. The article is a most complete one and is undoubtedly a very valuable contribution to the subject.

May 5th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Muzzling of Dogs in Dublin.

A RABIES scare exists in Dublin as elsewhere and is just now a subject of much interesting controversy. As regards the muzzling regulation, which has now been adopted by over eighty of the local country authorities in Ireland, the greatest difference of opinion prevails in Dublin. The South Dublin Union has approved of it and it is now enforced in that district, while the guardians of the North Dublin Union hold, "more Hibernico," a different view. The consequence is that it is not uncommon to see owners of dogs removing their muzzles as they cross over Carlisle bridge. Dr. Henry Fitzgibbon attended a recent meeting of the Guardians of the South Dublin Union and protested strongly against the muzzling of dogs as being calculated to produce rabies and to develop in rabid dogs a biting tendency. He failed, however, to have the order rescinded, although he utilised more than a column of the *Irish Times* in putting forward his views, which, as he is known to be a philanthropist and sportsman as well as a surgeon, carry a good deal of weight. "No muzzle," he says, "has yet been invented which is really effectual, and wire muzzles can all be dragged off by a dog's claws unless the strap round the animal's neck is almost tight enough to choke him." Dr. Fitzgibbon says, further, that this fact is so well known to dog owners that they do not attempt to really muzzle their dogs, but merely apply an ornamental contrivance to satisfy the police. A real muzzle is, moreover, in his opinion, a cause of madness, rabies sometimes originating without contact with another diseased animal. He gives three very interesting instances in support of this statement from his own experience, and concludes by strongly advocating the careful registration of all dogs, and obliging each of them to wear and be distinguished by a collar with a number attached. It is satisfactory to note from a statement of Mr. Gerald Balfour in the House of Commons last week that a Departmental Committee of the Board of Agriculture is being appointed to inquire into the working of the laws relating to dogs, and that the Irish Veterinary Department would be represented on it.

Royal College of Surgeons in Ireland.

The vacancy in the College Council was filled on the 4th inst. by the election of Dr. J. J. Cranny. The examining courts for the next year have just been elected.

Londonderry Eye, Ear, and Throat Hospital.

On April 28th the Lord Bishop of Derry and Raphoe opened a new Eye, Ear, and Throat Hospital for Londonderry and the north-west portions of Ireland. For some time Mr. Donaldson and other medical men have carried on this special work in premises in Hawkin-street, but as these buildings were hampered it was decided to provide a new building, which is situated in Rudge-street. This new hospital contains patients' waiting-rooms, consulting-rooms specially designed for the testing of sight, caretaker's room, and kitchen, all on the ground floor. Overhead are the operating-room and the two main wards male and female—each capable of accommodating six beds. The nurses' rooms are on the top floor. Special lavatory fittings have been placed in the operating-rooms, and altogether the new hospital is in every respect most complete and commodious.

Epidemic of Measles in Newtownards.

At present there is an epidemic of measles in Newtownards. The matter came before the School Attendance Committee at their meeting on April 30th, and it was reported that the sanitary officer had gone to the houses where the disease exists and warned the people not to send their children to school. It was decided not to close the schools yet.

Local Government Board Inquiry at Downpatrick.

At a meeting of the Downpatrick board of guardians held on May 2nd a report was read from the Local Government Board in reference to the inquiry recently held by their inspector, Dr. Clibborn, into the circumstances attending the death of a dispensary patient in Downpatrick during the time the medical officer was required at the Down Assizes. The Local Government Board think the medical officer showed a want of consideration in the case that was not creditable to him, and while he no doubt complied with the regulations, yet his action in not visiting the sick man was to be disapproved of, although it was probable medical assistance would not have availed in the case. They held that the relieving officer deserved censure for not attending at the dispensary on March 13th as directed by the medical officer, and they had caused the facts elicited at the inquiry to be noted against him in the records of the office. The Local Government Board added it was much to be regretted that the guardians did not formally sanction the arrangements proposed to be made as to a medical substitute during the absence of their medical officer.

May 6th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

A Strange Endemic.

A CURIOUS incident, which occasioned considerable disquietude amongst the inhabitants, occurred recently at Barfleur (Manche). A young girl, a native of Barfleur, came on a visit to her parents from Cherbourg, where she was in service. During her stay at home she consulted a medical man with a view of ridding herself of a parasite which she had brought from Cherbourg, and which, having multiplied with prodigious rapidity, had infested the house of the patient's parents and also that of a relative. Sulphur was burnt in the house, and the linen and flooring were washed with sublimate solution. The plague continuing with undiminished intensity the neighbours ceased visiting the infected houses and sent the denizens thereof "to Coventry." The authorities then took the matter in hand and delegated M. Edmond Perrier, Member of the Institute and Professor at the Museum of Natural History of Paris, to investigate this mysterious malady. He soon discovered that the *origo mali* was the Glyciphagus domesticus, an acarus closely allied to the acarus scabiei, but, unlike the latter, provoking scarcely any itching or cutaneous lesions in its hosts. This acarus is, it appears, very commonly present in houses, and it is frequently met with in the interstices of hair-combs which are badly kept. It multiplies especially in houses in which organic débris accumulate. In groceries an acarus, the Glyciphagus prunorum, which is perhaps identical with the Glyciphagus domesticus, often flourishes on dried fruits, such as prunes and figs. Feeding exclusively on organic matter it is only a pseudo-parasite. Besides the Glyciphagus domesticus there was discovered in these same contaminated houses at Barfleur a false scorpion, the othonius, which had invaded them in the train of the first-named parasite. The othonius, otherwise called the *pince des bibliothèques*, is the declared enemy of the Glyciphagus domesticus, upon which it feeds exclusively. Three millimetres long, and resembling a tailless scorpion, it is recognisable by its long fore-claws shaped liked the lobster's. The young Barfleuraise had at Cherbourg been a servant at a pork-butcher's, and it was probably at the *charcuterie* that she became infected. Her scalp was so full of acari that when she shook her head a cloud of them fell on her shoulders. Her father, a respectable fisherman, had his eyebrows attacked, the only symptom being a slight irritation. A garment left by the girl at an aunt's had sufficed to infect an exceptionally clean house. M. Perrier ordered the evacuation of the houses and sulphur to be burnt during six hours in the sealed-up rooms, with the result of killing every acarus, as also the othonius. An eau de Cologne and sublimate lotion relieved the persons of the sufferers of the parasite, although the treatment had to be prolonged in the case of the girl. The case is interesting in that the acarus, caught at a pork-butcher's, had lain dormant for some time on the hair-comb, and transferred thence to the scalp had thriven therein for a period of eighteen months and invaded consecutively the garments. From the garments the parasite had spread to two houses and their inhabitants and the othonius had promptly followed in pursuit.

The Prophylactic Employment of Marmorek's Serum before Cataract Extraction in Diabetics.

M. Boucheron[1] had recently under his care a man aged seventy years who, passing 46 grammes of sugar per litre of urine, was affected with a streptococcic disease—lymphangitis of the foot and leg. At M. Marmorek's suggestion 20 grammes of his anti-streptococcic serum were injected. Taking advantage of the consequent attenuation of the vitality of the streptococcus a cataract was extracted, strict antisepsis being, of course, observed. The corneal wound healed by first intention and the lymphangitis soon disappeared. This preventive treatment may prove useful previously to operation on a diabetic patient in whom suppurative processes due to streptococcic invasion are very prone to occur.

The Campaign against Foreign Medical Men.

The *Médecine Moderne* of May 2nd informs us that the *internes* in medicine and surgery of the Paris hospitals have almost unanimously—218 "yeas" against 11 "noes"—signed the following petition: "1. Any foreigner may be allowed to enter (*prendre ses inscriptions*) in a French faculty of medicine, but the degree of M.D. can only be accorded him *à titre d'étranger*, without conferring any right to practise in France. 2. No foreigner can practise in France unless he be naturalised a Frenchman, have performed military service in the French army, and be provided with the degree of *bachelier*." When we consider that a French M.D. is allowed to practise his art unmolested in our own free England we cannot but wonder that educated young men—the cream of the French *jeunesse médicale*—should lend themselves to the propagation of such illiberal proposals. I wonder what comment landlords of hotels and boarding houses and the tradesmen in general of French health resorts will make on a petition the application of which would hardly be favourable to their interests. We may perhaps treat the above move as the outcome of youthful exuberance, but that a strong anti-foreign current has set in amongst members of the profession in this country is a melancholy fact. Were our French *confrères* more frequent visitors to England they would learn that the travelling Briton prefers, rightly or wrongly, to be attended in case of illness by an English physician, and he would then not allow his common sense to be over-ruled by arguments dictated by his supposed commercial interests. The English practitioners who would renounce their nationality for the sake of being allowed to practise in France are, I am sure, in a hopeless minority. The adoption of protectionist measures could therefore only have the effect of stemming the tide of English visitors to French health stations. The Frenchman who cannot be accused of indifference to his pecuniary interests would then claim loudly a return to the present *régime*, which is in accordance with the liberal principles that should prevail in every civilised country.

May 5th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

The Serum Treatment of Scarlet Fever.

A PAPER on the Treatment of Scarlet Fever by Dr. Marmorek's Anti-streptococcic Serum has been read before the Berlin Medical Society by Professor Baginsky, who said that streptococci are often found in scarlet fever, especially in complications and in the septic form of the disease. Dr. Marmorek has not discovered the specific antitoxin for scarlet fever, but he has found that the serum of animals immunised in the usual way by virulent cultures of streptococci has immunising effects on animals submitted to experiment and a beneficial influence in streptococcic diseases, such as erysipelas and cellulitis. It is inoperative against the special virus of scarlet fever, but Dr. Marmorek believes that it is useful in the streptococcic complications of that disease, if given in repeated and sufficiently large doses till the temperature becomes normal. He has in Paris used this treatment for ninety-six cases of scarlet fever in which streptococci were found, Loeffler's bacillus being also present in seventeen of them. The first injections for the children were 10 c.c., but the quantity was afterwards raised to 40 and 80 c.c.; in one instance of pneumonia as much as 90 c.c. (equal to 3¼ fluid ounces) were successfully given. The antitoxin had a specially favourable influence on inflamed lymphatic glands, otitis, and tonsillitis, suppuration being sometimes prevented. Professor Baginsky then gave an account of the results obtained by himself in the treatment of 57 cases of scarlet fever both with and without complications. Nine of those cases ought properly to be disregarded, partly because the treatment was interrupted by failure in the supply of serum and partly because the patients were actually moribund when the serum was used. The other forty-eight cases may be divided into three groups. In the first, consisting of twenty-seven patients, the treatment was begun in the first stage of the illness, there was a rapid improvement after the injection of from 10 c.c. to 30 c.c., and no complications ensued. Professor Baginsky, however, remarked that mild cases are not rare, even in the absence of any treatment. In a second group the antitoxin was also administered from the beginning, but the results were much less satisfactory. Of sixteen patients six died with general sepsis or septic complications, and the remainder suffered from severe otitis, glandular suppuration, nephritis, &c. It is possible, however, that these unfavourable results may have been due to an insufficient quantity of serum having been used. In the third series, consisting of five cases, the antitoxin was administered, not from the beginning, but during the course of the illness. One of these patients died from otitis with thrombosis of the sinus, in another the submaxillary gland suppurated and had to be opened, while in the three remaining cases a favourable influence on the temperature was probable. Taking the whole series, there were seven deaths among forty-eight patients, or a mortality of 14·6 per cent., a relatively good result compared with the average mortality of this year's epidemic, which has been about 30 per cent. Professor Baginsky was of opinion that it would be premature to form a definite opinion as to the usefulness of the remedy, but that there is sufficient justification for giving it a trial.

May 5th.

[1] Société de Biologie, April 25th.

ROME.

(FROM OUR OWN CORRESPONDENT.)

The Therapeutics of Cancer.

BEFORE the Associazione Medica Lombarda, in the presence of the leaders of the Milanese School, Dr. Jona read a paper the other evening on "Cura del Cancro." After a brief survey of the recent literature of the subject he subjected to a critical analysis the various attempts to utilise sero-therapy either by inoculating the patient with the toxine of erysipelas or by injecting the blood serum of animals prophylactically inoculated with liquid drawn from carcinomatous tumours. This latter method, according to the instructions laid down by Dr. Richet and Dr. Hérícourt, was that adopted by Dr. Jona, who had under his care six persons suffering from that special form of malignant disease. One of these patients—a woman who for six or seven months had laboured under well-defined cancer—was manifestly relieved by the treatment; another—a man afflicted with cancer of the stomach and unable to digest or even tolerate food passed down the œsophagus—had no sooner begun the sero-therapy than he recovered the power of alimentation by the *primæ viæ*, digesting with perceptibly favourable results as many as twelve eggs daily. Two other patients—one suffering from cancer of the tongue and the other from cancer of the rectum—showed distinct improvement after the first injections; but the improvement was not maintained. The fifth and sixth cases, one of cancer of the tongue and the other of the inferior maxilla, remained without response to the treatment. Dr. Jona's paper was distinguished by much caution as well as thoroughness, its writer contenting himself with having made out a case for further experiments to be laid before the Associazione Medica Lombarda.

The Drainage of Milan.

Though the English-speaking residents in Milan are few the English-speaking visitors are very numerous—so numerous, indeed, as to make the sanitation of that mighty *entrepôt* of the Brindisi route a matter of very considerable importance, her water-supply is still defective and will remain so till she follows the example of Florence, of Naples, and, above all, of Rome, and replaces her wells sunk in the subsoil by fresh, pure water brought down in adequate volume

from the neighbouring hills. Her drainage is at present engaging municipal and, indeed, public attention, and no wonder, considering the quasi-mediæval system that has been allowed to vitiate her health so long. Her mortality in consequence reaches a figure discreditable to a city of her wealth and European importance. No doubt she has shared in some of the benefits of nineteenth century hygiene, and her death-rate is not what it was fifty years ago—viz., about 40 per cent. Still, a mortality ranging from 27 to 28 per cent., excluding the garrison, shows badly beside that of Zürich, for instance, with its 17 per cent., of Geneva with 19 per cent., of Frankfort with 20 per cent., of Lyons with 21 per cent., and of Brussels with 22 per cent. In these circumstances the proposals now before the civic authorities for relieving the population of its sewage on a comprehensive, systematic, and effective scale must be welcomed as a step all too tardily deferred, preceding efforts in the same direction dating as far back as 1866. Within the last seven years 4,966,000 francs have been expended in such drainage as already exists, but twice as much again will have to be laid out before Milan can be safe, not merely for her own inhabitants, but for the travelling public to which she owes not a little of her wealth.

May 4th.

VIENNA.

(FROM OUR OWN CORRESPONDENT.)

Alleged Fatal Injection of Diphtheria Antitoxin.

PROFESSOR PALTAUF has published in the *Klinische Wochenschrift* a highly interesting article showing that the *post hoc ergo propter hoc* argument has been greatly misapplied in connexion with the unfortunate incident in Berlin, when a child died almost immediately after receiving a hypodermic injection of diphtheria antitoxin. There is not as yet any proof that antitoxin serum possesses dangerous qualities, and, on the other hand, it is well known that in a great many cases of sudden death occurring both in children and adults post-mortem examination shows only insignificant lesions. In Vienna, where post-mortem examination is obligatory in every case of sudden death, some important observations have been made on this subject. For instance, Dr. A. Paltauf, brother of the writer of the above article, but now deceased, has pointed out in a pamphlet on the Relation between Sudden Death and the Thymus Gland that during 1887 there were 126 and during 1888 there were 99 deaths of children in Vienna in which post-mortem examination yielded no definite results, enlargements of the lymphatic glands and the spleen and paleness of the skin being the most conspicuous appearances. The late Professor Kundrat also observed these symptoms in rachitic children and believed that rachitis is not only an abnormality in the growth of the bones, but a general disturbance of the animal organism. The above symptoms have also been noticed in adults who have died whilst taking a bath, and therefore a so-called *status lymphaticus* has been suggested as the cause of death in these cases. Instances of death after the use of antitoxic serum have been quoted by Moizard, Quinon, and Alföldi, but none of the cases have been examined in such a manner as to prove the absence of any other disease. One of Alföldi's cases was a child who after having been immunised was allowed to sleep with his brother suffering from diphtheria and died in three days. Professor Paltauf's statistical returns show among 248 cases of prophylactic injection a sickness incidence of 6·85 per cent.—namely, angina in four instances, diphtheria with moderate local symptoms in nine cases, and severe diphtheria in four cases. It is well known that the injection may be followed by exanthemata, pains in the joints, and fever; but there is no case in which death has resulted from these sequelæ. Among 603 cases there were 44 examples of local erythema, 17 of general erythema, and 2 of rheumatic arthritis. The last symptom, which is also the gravest, occurred, therefore, in only 0·33 per cent., and notwithstanding these comparatively unimportant drawbacks there is no doubt that parents will continue to rely on antitoxic serum, by which the diphtheria mortality has been reduced from 40 per cent. to 14 per cent. The good effect of the serum treatment appears from the following statistics. In Vienna there were 1631 deaths from diphtheria in 1893, 1637 in 1894, and 690 in 1895 when the serum treatment came into use; in Trieste there were 394 deaths from diphtheria in 1894 and 272 in 1895; in Prague there were 193 deaths from diphtheria in 1894 and 83 in 1895; in Brünn there were 104 deaths from diphtheria in 1894 and 51 in 1895. In view of these results Professor Paltauf said that it is unjustifiable to condemn a recognised system of medical treatment and to create alarm in the minds of the public on account of a death the relation of which to the injection of antitoxin has not been ascertained. On the other hand, Professor Paltauf's statistics and his inferences therefrom have in the same journal been called in question by Professor Kassowitz, who asserts that the serum treatment was introduced in Trieste in 1894 and was employed in 362 cases from August to the end of the year. Furthermore, during the period from 1889 to 1893, both years inclusive, the annual deaths from diphtheria averaged 142, the actual numbers for each year being 98, 93, 118, 182, and 222, but there were 394 deaths in 1894 and 271 in 1895. Trieste, in fact, has a very high mortality from diphtheria as compared with other large towns, inasmuch as for each 10,000 of the population there died from diphtheria in Trieste 16·9; in London, 5·6; in Paris, 1·7; in Budapest, 4·2; in Munich, 5; in Leipzig, 4·5; and in Berlin, 5·3. In some towns, such as Paris and Budapest, the absolute mortality has decreased since the introduction of the serum treatment, but in London, although the diphtheria mortality was lower in 1895 than in 1893 and 1894, it was nevertheless very high in the last quarter of 1895, during which period there were 836 deaths from diphtheria, whereas there were only 469 in the same quarter of 1891, before serum treatment was in use. In Moscow and St. Petersburg the deaths from diphtheria have even increased, and Professor Kassowitz, therefore, believes that a decrease of diphtheria mortality is not attributable to the beneficial effect of antitoxin serum, neither does an increase in the mortality lead to the conclusion that the serum is injurious.

The Effect of Amyl Nitrite.

At a recent meeting of the Medical Society Dr. Winkler stated that a small quantity of amyl nitrite introduced into the respiratory organs of a narcotised dog produces a decrease of the pressure in the arteries and the characteristic symptoms of cardiac asthma—namely, dyspnœa, with accelerated and deep breathing and œdema of the lungs manifested by crepitant râles. Although the blood pressure is decreased in the arteries it is increased in the left auricle. The decrease of the blood pressure after the administration of amyl nitrite has hitherto been ascribed to its action as a vaso-dilator, but it obviously has an effect on the heart as well as on the vessels.

May 4th.

EGYPT.

(FROM OUR OWN CORRESPONDENT.)

Medical Department of the Egyptian Army.

IT is now five weeks since the English Government suddenly determined that the time had arrived for Egypt to extend her southern frontier and to embark upon an expedition of which neither the goal nor the cost has yet been foretold. It is greatly to the credit of the English officers forming the Headquarter Staff that without a hitch 15,000 men have now been massed between Wady Halfa and Akasheh. The only difficulty which has transpired so far is the impossibility of providing commissariat transport for men and animals without due preparation. Practically nothing can be bought on the spot, and consequently the men and horses at the advanced post have come very badly off for food. No serious forward movement can be attempted until the army is provided with at least two months' rations and forage, and this is not likely to take place for the next two months. Convoy duty under a broiling sun and working for thirteen hours a day on desert tracks so rough that only about eighteen miles can be traversed daily is the sort of work which has been uncomplainingly endured. Surgeon-Lieutenant-Colonel Gallwey, principal medical officer of the army, is still in Cairo making his final arrangements for the disposition of men and material, but he hopes now to join the Headquarter Staff at Wady Halfa. There are now seven British officers under him all lent by the English army and all of the rank of surgeon-captain. The two seniors have the Egyptian rank of *kaimakan* or lieutenant-colonel, and the

others are *bimbashi* or major. All medical officers hold military rank only like all other officers. Surgeon-Captain Hunter is the senior medical officer of the expeditionary force and is in charge of Wady Halfa Hospital, which may vary from 140 to 340 beds. Surgeon-Captain Penton is in charge of the Akasheh field hospital of 200 beds, with a section of a movable field hospital ready equipped to accompany any forward movement. Surgeon-Captain Trask is at Sarras with a ten-bed hospital and another movable field hospital. Surgeon-Captain Spong is sanitary inspector of the line of communication between Wady Halfa and Akasheh, and is responsible for all latrines and the conservancy of the various camps and drinking-water supplies. Surgeon-Captain Hill Smith is sanitary officer at Wady Halfa, Surgeon-Captain Whiston is at the general hospital in Cairo, and Surgeon-Lieutenant Dunn is at the Suakin permanent hospital. To work under the English medical officers there are fifty-five Egyptian medical men, two of whom have the rank of bimbashi. These natives get paid £12 a month on joining and this increases up to £35 a month. The following medical posts are now established south of Wady Halfa:- Gemai, Sarras, Railhead, Semneh, Mograt Wells, Wady Atireh, Ambigol (which also has a field hospital for 20 beds), Ambigol Wells, Tangoor, and Akasheh. North of Wady Halfa there are the two permanent hospitals at Assouan and Korosko. The slightly sick or wounded will be treated at the front and returned as rapidly as possible to the ranks, while the severe cases will be gradually evacuated until Cairo is reached. The non-commissioned officers and men of the medical service number 350, including 100 of the medical reserve who have just been called up. The Egyptian army is at all times the healthiest in the world, and the present rate of sick is under 3 per cent. When the regiments were ordered to the front there was no weeding out of weakly men, for all were kept ready for active physical work. This does not apply to the black battalions, where there were many older men engaged for life. Several small innovations are worth mentioning. A bearer company for 100 wounded has been attached to the sections of field hospitals, provided with camel cacolets specially designed by Dr. Graham Bey, who has lately been transferred from the army to the sanitary department. A small bearer company of ten mules will accompany cavalry and camelry. Cotton wool has been obtained from Germany so compressed that it takes up only half the bulk of the ordinary packets. Each English surgeon-captain will be provided with a medicine chest of compressed tabloid drugs similar to those in use on the Congo. Instruments and all appliances have been ordered from London of the newest approved aseptic patterns. Lastly, a six-bed hospital has been sent to Wady Halfa for the use of English officers, of whom there are now 110 serving on the Nile. The diseases most likely to be met with at this season are sunstroke, simple continued fever, diarrhœa, and dysentery.

Cholera at Alexandria.

During the month of March there were only nine cases of cholera reported with nine deaths. In fact, from March 12th to April 1st there was only one case, bulletins were discontinued, and it was quite hoped that the disease had come to an end. But during the first three weeks of April there have been cases almost daily, numbering altogether 45, and of these 42 have died. An English merchant has lately had a slight attack of cholera, but with very few exceptions the disease has from the beginning been confined to the poorest native quarters. Outside Alexandria there has only been one case and that was at Assiout in a man who had just arrived there from Alexandria.

Infectious Fevers.

During the last three weeks there have been 287 cases of small-pox and 54 deaths. The cases have been reported from thirty-four villages in Lower Egypt and about seven in Upper Egypt. During the same weeks there have been 229 cases of typhus fever and relapsing fever with 34 deaths, almost all being from fifteen villages in Lower Egypt. Measles in two villages and at Port Said has furnished 32 cases and 11 deaths.

Cairo, April 22nd.

AUSTRALIA.

(FROM OUR OWN CORRESPONDENT.)

The Conference on Federal Quarantine.

THE conference of medical representatives from the colonies of New South Wales, Victoria, South Australia, and Queensland, which was held in Melbourne from Feb. 28th to March 3rd to consider the subject of Quarantine, agreed upon certain resolutions of which the following is an abstract:—

1. That there be uniformity in the laws and practice relating to quarantine throughout the Australasian colonies; that the notification of all quarantinable diseases be made compulsory, and that each colony agree to have constantly in readiness accommodation for the isolation of persons who may be affected with any disease quarantinable in that colony, and to urge the removal of such persons from infected vessels.
2. That all ships coming into Australasian ports be liable to medical inspection for quarantine purposes.
3. That three fully qualified medical men, experts in the diagnosis and treatment of quarantinable diseases, be appointed as federal medical officers, devoting the whole of their time to the performance of their duties, and having their headquarters at Albany, Adelaide, and Thursday Island respectively, and, if found necessary at a later date, a fourth at Palmerston.
4. That a federal supply of calf vaccine lymph, sufficient for the vaccination of say 600 persons, be maintained at each of the ports of Albany, Adelaide, Thursday Island, Palmerston, and Colombo, such supply being available for the master of any vessel having a history of small-pox.

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11. That every person who refuses vaccination be detained until the health authority is satisfied of the inability of such person to spread small-pox, but for no shorter period than twenty-one days.

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14. That the method adopted by the health authority of Victoria in dealing with letters in quarantine be regarded as completely satisfactory—viz., the soaking of the written letters, enclosed in their envelopes and addressed, in a solution of corrosive sublimate in methylated spirit, of the strength of 1 part of the former to 100 of the latter, for a period of twenty minutes.
15. That all dogs imported into Australasia be subject to quarantine for a period of not less than six months, and that such quarantine be in every case performed in the Government quarantine ground only.

These recommendations were submitted to a conference of the Premiers of the respective colonies and were adopted with some modifications, such as that no ship should be relieved from the payment of quarantine expenses; that the experts to be appointed as federal quarantine officers should be at liberty to perform other public duties, that they should be nominated by the colonies in which they were to serve, and that their appointments should be approved by a majority of the contracting Governments. The proposal to hold another conference in twelve months was not adopted.

Disputes at the Adelaide Hospital.

Reference has previously been made to the unfortunate state of affairs at the Adelaide Hospital. The Government has now actually interfered, with very unsatisfactory results. It insisted on the re-instalment of one of the nurses who was one of the principals in the original dispute, and has appointed a new board of management, nominating thereon a practitioner who was removed some two years ago from the local branch of the British Medical Association for alleged unprofessional conduct. The Honorary Staff immediately resigned, as did two of the members of the board. The member to whom exception was taken then withdrew from the position, but the staff have not withdrawn their resignations, and so the matter stands.

Murderous Attack on a Medical Man.

Dr. Cunningham of Talbot, Victoria, has just been made the victim of a most violent attack by a supposed lunatic. On answering a night ring at his door he was felled by a blow from a tomahawk, and his assassin continued to batter his head with this implement. Mrs. Cunningham came to his rescue and drove off the would-be murderer with a pair of tongs. The doctor's skull is severely fractured, and his recovery is still doubtful. It appears that the assassin had his eye removed some years ago at a hospital and has ever since entertained feelings of animosity towards the medical profession. Great sympathy is felt for Dr. and Mrs. Cunningham who have been in the district for many years and are exceedingly popular.

The Toxic Action of the Secretion of the Femoral Gland of the Ornithorhynchus.

Some time ago reference was made to some cases supposed to be due to poisoning by the spur on the hind leg of a platypus or ornithorhynchus, and doubt was expressed as to whether the secretion of the femoral gland of this strange animal was toxic or not. In the recently published transactions of the Linnean Society of New South Wales is a paper on this subject by Dr. C. J. Martin and Mr. F. Tidswell. As a result of their investigations they find that the secretion is poisonous—at least at certain seasons of the year—and owes its toxic properties to proteid constituents in which it resembles the venom of snakes, causing like it intra-vascular clotting in large doses and retarding coagulation in small

doses. Like snake venom also it produces an almost instantaneous fall in the blood-pressure, capillary hæmorrhages, irritation, and œdema when locally applied, the local effects being more marked than in the case of snake venom.

Pharyngomycosis Leptothricialis.

In the March number of the *Australasian Medical Gazette* Dr. C. Purser records the case of a patient suffering from asthma and also from a sore-throat, the tonsil and mucous membrane below it being swollen and showing a number of white projections which gradually increased in number and size and were removed by curetting. The growths were found to contain an excessive number of the bacillus (leptothrix) buccalis maximus and the leptothrix innominata, and to their excess the condition is attributed.

Health of Melbourne.

The annual report of the medical officer of health for the city of Melbourne for 1895 shows that in general the health of the population has been good, the rate of mortality being 15·1 per 1000, an improvement on the two preceding years. Twenty deaths are ascribed to influenza, as against 8 in 1894. Tuberculosis caused 177 deaths, and the rate of mortality from epidemic disease was extremely low.

Obituary.

George Whitfield Sutherland, B.A. Syd., M.D. Lond., died at Sydney on March 3rd at the early age of thirty-two years. Dr. Sutherland had a most brilliant career as a student, but force of circumstances drove him into a very large lodge practice in Sydney, and to the strain and overwork attaching thereto his early death is mainly attributable.—Charles McCarthy, M.D. Melb., L.F.P.S.G., died at Melbourne on Feb. 24th in his eighty-third year and after a residence of thirty-five years in the colony. He was well known as an authority on inebriety, having been for twenty years medical superintendent of the Northcote Inebriate Retreat, near Melbourne.

Hospital News, &c.

Dr. Cecil Purser has been appointed assistant physician to the Prince Alfred Hospital, Sydney, and Dr. W. H. Crago assistant surgeon to the Sydney Hospital.—Dr. J. R. MacQueeney and Dr. H. M. Maudsley have been appointed consulting physicians to St. Vincent's Hospital, Melbourne.—A new wing at the Eye and Ear Hospital, Melbourne, was recently opened by his Excellency Lord Brassey. The wing is called the Aubrey Bowen wing, in memory of the late Dr. Bowen, who was one of the founders of the hospital and one of its first surgeons, and to whose generosity the institution owes much. The new wing has been built by his widow, who has also built a new operating theatre for the Melbourne Hospital, which will be formally opened in a few weeks.—Dr. Fiaschi, one of the leading surgeons in Sydney, inspired by his patriotic feelings, has left for Abyssinia to serve as a volunteer in the Italian army. The honorary medical staff of the Sydney Hospital passed a unanimous resolution expressing its sense of loss sustained by Dr. Fiaschi's departure.—The committee of the Williamstown Hospital, near Melbourne, having investigated certain allegations made by one of the staff, have come to the conclusion that there is no ground for these allegations and have called upon the gentleman who made them to retract them or resign.

April 4th.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—ELECTION OF EXAMINERS.—The following have been elected examiners of the College:—Examiners in Anatomy: John Barton and Alexander Fraser. Examiners in Surgery: Arthur Chance and William Stoker. Examiners in Physiology and Histology: J. Alfred Scott and Charles Coppinger. Examiners in Biology: J. Alfred Scott and George Burbidge White. Examiners in Pathology: Thomas Myles and Edward H. Taylor. Examiner in Midwifery and Gynæcology: E. Winifred Dickson. Examiners in Ophthalmology: Patrick William Maxwell and John Benjamin Story. Examiners in Dental Surgery and Pathology: Arthur W. W. Baker and R. Theodore Stack. Examiners in Mechanical Dentistry: Shenstone J. Bishop and Charles Wall. Examiners in Chemistry and Physics: J. Dallas Pratt and Edwin Lapper. Examiner in Sanitary Law and Vital Statistics: D. Edgar Flinn. Examiner in Bacteriology: J. Alfred Scott. Examiner in Engineering and Architecture: J. Charles Wilmot. Examiner in Languages: Robert John Montgomery. Examiner in Mathematics, Physics, Dictation, and English Essay: Robert Morton.

Obituary.

WILLIAM LOCKHART, F.R.C.S. ENG.

WILLIAM LOCKHART, who was so well known as a medical missionary in the far East, and whose name is associated with some of the most stirring incidents in the history of our relations with China, passed away on the morning of April 29th at his residence at Blackheath at the ripe age of eighty-four years. Up to the end of the previous week he was full of vigour and in the enjoyment of all his faculties, but on Monday, April 27th, he had a severe attack of vomiting and was found to be suffering from obstruction of the bowel. At a consultation held that night it was found that, owing to his advanced age and the state of the pulse, all operation was out of the question, and he soon afterwards became unconscious and passed peacefully away without any suffering. Mr. Lockhart pursued his medical studies at Guy's Hospital and the Meath Hospital, Dublin, and became a Member of the Royal College of Surgeons of England in 1834 (he was elected to the Fellowship in 1857). He first began practice as assistant to Mr. Wainwright of Liverpool, where he remained for three years, but on the return of John Williams and Dr. Moffat from their missionary journeys he was fired with the desire of becoming a medical missionary and offered his services to the London Missionary Society in that capacity. He was appointed to China, and left England with Mr. (afterwards Dr.) Medhurst, then engaged as a missionary to the Chinese in Batavia. Mr. Lockhart began his work at Macao in 1839, Dr. Parker, an American, having already obtained a footing as a medical missionary at Canton. From Macao he moved to Chusan on its first occupation by the British, and as soon as Shanghai was opened up, in 1843, he moved on to that city and founded a hospital there which was most successful from the first, the Chinese patients soon reaching the large number of 10,000 in ten months. Mr. Lockhart remained there until 1858, and during the Tai-Ping Rebellion, when the rebels had taken possession of the city, which was invested by the Imperial troops, his hospital, which stood in an isolated position outside the city walls, lay between the two contending armies exposed to the fire from both sides. Under these trying conditions he steadily pursued his work among the sick and wounded, the shells on several occasions bursting within the building. The last shell which entered the hospital burst upon the floor of the hall crowded with patients, on the very spot from which only a few moments before a wounded patient had been removed. The French troops having joined the Imperialists, Mr. Lockhart volunteered for the perilous errand of entering the city in order to try to persuade the rebels to surrender. In company with his friend Mr. Wylie he safely passed the rebel outposts, and for several hours used his endeavours to induce them to surrender to avoid further bloodshed. The commanders, however, while listening to his proposals, declined to yield the city, which they afterwards evacuated and burned. Mr. Lockhart always described this burning of the city of Shanghai as the most impressive sight he had ever seen. He returned to England in 1858 leaving the hospital under efficient superintendence for the further extension of its sphere of usefulness, and he had the satisfaction of knowing that it is at the present time the most important hospital for Chinese in China; the early picturesque Chinese structure has been replaced by a very substantial modern building with a hundred beds and a large out-patient department.

During his short stay in England stirring events again took place in China. Mr. Lockhart's brother-in-law, Mr. Parkes (afterwards Sir Harry Parkes, Her Majesty's Minister to Japan and China), whilst on a diplomatic mission to the Chinese forces under a flag of truce, had been treacherously taken prisoner with his companions, many of whom died after cruel sufferings. As a punishment for this act of treachery Lord Elgin advanced on Peking and destroyed the celebrated Summer Palace, the British Embassy taking up its quarters in the city in October, 1860. Mr. Lockhart having returned to China for this purpose was able, through his position as medical officer to the Embassy, to establish a hospital in the capital in October, 1861, and during the two and a half years of his stay there over 30,000 patients were treated. Sir Harry Parkes well expressed his estimation of the value of Mr. Lockhart's work in China in one of his letters: "The political good which your proceedings must

have will be very great, and your mission will achieve more than the diplomatic in impressing the masses of Peking in our favour. Your hospital I look upon as the most marked incident in our relations with China that has occurred since the signing of the last treaty, and most sincerely do I pray that you may go on and prosper."

Mr. Lockhart finally returned to England in 1864, family circumstances necessitating his relinquishment of active service in the mission field, and he commenced private practice at Blackheath in the following year. From that time until the end of March, 1895, he remained in practice and his devotion to his professional duties during that period was uninterrupted. In the exercise of his profession he was prompt, skilful, and patient of results. Of keen insight, he was always quick at diagnosis and to the very last always prepared for instant response to the call of duty. His loving kindness and tender cheerfulness endeared him to his patients, amongst whom he was always looked for, not only as the trusted adviser, but as the much-loved friend. During these many years of practice he was able, by economy of time and strict punctuality, to maintain his relations with the London Missionary Society, at whose board and stated committee meetings he was a most regular and valued attendant. He had collected a large and valuable library of works on China unique in its variety and comprehensiveness. This he gave quite recently to the London Missionary Society upon certain conditions, which have been carefully carried out, so that it is available for reference at the Mission House and is known as the "Lockhart Library." In his own neighbourhood he held for many years a seat on the board of guardians of the Lewisham Union, and his influence was strenuously exerted to secure the appointment of a resident medical officer and the erection of the infirmary on its present healthy site. He also took part in other local oganisations, where his experience as a medical man was highly valued.

Mr. Lockhart was universally beloved; he was full of life, brightness, and energy up to the very day before his short illness. The devotion and noble self-denial exhibited during his career as a medical missionary were carried through every relation of later life, and a more thoroughly upright and honourable man in all his dealings it would be very hard to find. In the most trying circumstances of his unusually varied life he always exhibited the utmost fortitude, while his kindness of heart endeared him to all who knew him. He married in 1841 Miss Catharine Parkes, the elder sister of Sir Harry Parkes, who survives him, and with whom he had the happiness a few years ago of celebrating his golden wedding, surrounded by a large and loving circle of sons, daughters, and grandchildren.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The death of the following eminent foreign medical man is announced:—Dr. F. Vulliet, Professor of Midwifery and Gynæcology in the University of Geneva.

THE CONGRESS OF MEDICINE IN WIESBADEN.

(Continued from p. 1258.)

APRIL 10TH.

The Therapeutic Value of Thyroid Preparations.

PROFESSOR EWALD (Berlin) said that the late Professor Schiff of Florence was the first to show that complete excision of the thyroid gland produces grave and even fatal pathological alterations in the organism; he was also the first to suggest the implantation of small pieces of gland and the hypodermic injection of thyroid fluid in order to counteract these symptoms, and his experimental investigations were turned to practical account by Horsley and Bircher, who administered fresh glands as well as thyroid preparations to patients suffering from various maladies. The efficacy of this was soon recognised, but the active principle of the gland eluded observation for some time, and has only recently been discovered by Professor Baumann of Freiburg, who has succeeded in isolating the so-called thyroiodin, an albuminous compound containing a considerable proportion of iodine. The administration of thyroiodin promotes metabolism, and strong injections of it induce a condition to which the name of thyroiodismus has been given, a group of symptoms comprising anorexia, insomnia, cardiac palpitation, and angina pectoris; the nervous system, also, becomes disturbed and albumin appears in the urine, but the pulse is not affected by thyroiodin when given during only a short period. Glycosuria was observed by Professor von Noorden five times in seventeen cases, but Professor Ewald has never met with this complication. The part played by thyroiodin in the animal economy may be described, according to Professor Ewald, as consisting in the constant introduction of a definite organic iodine compound into the circulating blood, where it destroys certain virulent products the existence of which is inferred from the pathological symptoms developed after the removal of the gland. The thyroid fluid, in fact, acts as an antitoxin against some toxines produced by the normal metabolism of the human body. If the thyroid fluid is deficient or absent these toxines accumulate and symptoms of abnormal metabolism make their appearance, whilst, on the other hand, if it is artificially supplied so copiously that the point of neutralisation is exceeded the result is the state of over-action above described, but this toxic effect is of a transitory character and does not detract from the high therapeutic value of the substance. Thyroid preparations when administered for therapeutic purposes should be given in very small quantities, subsequently increased by degrees. The dose should not exceed ten tablets, containing three milligrammes of iodine, and there will be no unpleasant effects. Thyroid treatment is of the greatest value in myxœdema. Of course, there are frequent relapses when the treatment is discontinued, but soon after it is resumed the patient's condition once more improves. It has also been successfully employed in sporadic or endemic cretinism. In lupus and tuberculosis its efficacy is not so obvious. The thyroid treatment of obesity was first suggested in England and has proved very successful. The daily use of from three to five tablets causes a decrease of body-weight ranging from 4 to 5 kilogrammes (from 9 lb. to 11 lb.) in a week, and in some cases a decrease of even 10 kilogrammes (22 lb.) has been observed. The loss of albumin must be compensated by an albuminous diet. Pure thyroiodin produces the same effects as the tablets; by the daily use of minute doses of this substance a man weighing 96 kilogrammes (= 212 lb.) was found to lose 2 kilogrammes (= 4½ lb.) within a week. In epilepsy, acromegaly, and rachitis its success is very doubtful. In conclusion Professor Ewald said that much has yet to be learned regarding thyroiodin; it is, however, in his opinion, a very powerful therapeutic agent.

Professor BRUNS (Tübingen), following Professor Ewald, spoke on the Thyroid Treatment of Goitre, which he has now carried out in more than 350 cases. It was his experiments on the lower animals which led to the discovery that the administration of thyroid preparations causes the swollen gland to decrease and eventually to regain its normal size. Cystic bronchocele and Graves's disease are not amenable to this treatment. His first cases were treated by fresh thyroid glands and the later ones by thyroid tablets, of which not more than two were ever given to adults, while children had only half a tablet or one tablet, and disagreeable effects were thereby avoided. In his practice there have been only three cases in which the heart became so much affected that the remedy had to be stopped. He has used thyroiodin in twenty-four cases and, as far as he can judge from so limited an experience, he believes this substance, newly discovered by Professor Baumann, to be not less efficacious than the other thyroid preparations. Professor Bruns summed up the results of his observations as follows: 1. The great majority of cases of goitre were benefited by the thyroid treatment. 2. About 25 per cent. remained unaffected; in 8 per cent. the enlargement disappeared altogether; in 33 per cent. portions of the growth continued to persist; and in 33 per cent. the decrease, although obvious, was not very great. 3. The highest proportion of successful cases was found among young persons, the obstinacy of the disease increasing with the age of the patient. 4. The good effects of the treatment became visible in from four to six days; in 60 per cent. the greatest decrease was observed within a fortnight, and in 40 per cent. within three or four weeks. 5. Recovery was most probable and most rapid in the hyperplastic form of goitre. 6. In more than 70 per cent. of the cases the enlargement reappeared after the cessation of the treatment, the relapse beginning sometimes in a month, or sometimes in from three to four months, but resumption of the treatment caused the goitre to diminish once more. Professor Bruns has studied the histological changes presented by

the reduced gland, and has found that the colloid substance is augmented, while the follicles are partly dilated and partly atrophied.

Dr. BLACHSTEIN (St. Petersburg) in the course of the discussion called attention to the association of goitre with diabetes.

Dr. MINKOWSKY (Strassburg) said that the thyroid gland had no influence on the production of glycosuria, for the extirpation of the pancreas in dogs on which thyrectomy had been previously performed is followed by glycosuria.

Professor HEUBNER (Berlin) recommended thyroid preparations for rachitis combined with anæmia.

Professor SCHULTZE (Bonn) gave details of a case of tetanus which had been treated by thyroiodin, but without success. In acromegaly, also, it had not in his experience proved to be of any advantage.

Dr. REHN (Frankfort) showed photographs of children who had suffered from cachexia thyreopriva, but who entirely lost their cretinoid aspect after a course of thyroid treatment.

Professor KAST (Breslau) said that thyroid preparations ought not to be taken except under medical supervision. He believed this warning to be very necessary, for he had known cases where persons suffering from obesity had resorted to these remedies against the advice of their medical attendants and serious complications had resulted which might easily discredit the treatment.

The Uric Acid Diathesis.

Professor VON NOORDEN (Frankfort) said that the following rules should be observed in the treatment of the uric acid diathesis. 1. A plentiful use of water. 2. A special dietary unfavourable to the formation of uric acid: that which is usually prescribed does not obviously lessen the formation of uric acid, and a considerable reduction can only be obtained by such a departure from the ordinary way of living as would present many practical difficulties. 3. The administration of substances capable of dissolving uric acid in the urine, especially potassium and lithium salts, piperazine, and lysidine. 4. Abstention from articles such as mineral acids and food containing nucleins, which have the effect of diminishing the solvent power of urine for uric acid. The administration of alkalies, although theoretically correct, requires some precaution. There is no necessity for rendering the urine alkaline, and there is even no objection to its having a slight acid reaction. The best means of retaining the uric acid in solution in the urine is the administration of carbonates or salts of vegetable acids. Among twenty-one patients who were sufferers from the uric acid diathesis and were treated with carbonates and salts of vegetable acids only two had a relapse in the course of a year, although formerly all of them used to have an attack every fortnight. In some cases from 2 to 4 grammes (30 to 60 grains) of carbonate of calcium are sufficient, but in others as much as 20 grammes (three-quarters of an ounce) is requisite.

Professor ROSENFELD (Breslau) said that as the formation of uric acid calculi depends on the amount of free uric acid present in the urine it is very important to ascertain this amount. The determination may be effected by passing the urine regularly through a paper filter; the uric acid retained on the filter is then dissolved in solution of caustic potash, precipitated by hydrochloric acid, and weighed. Urea increases the solubility of uric acid. A patient with a tendency to uric acid deposits should take from 5 to 20 grammes (from 75 grains to three-quarters of an ounce) of urea daily, and his diet should also be carefully regulated. Any increase in the allowance of animal food or in the amount of sugar or fat that is consumed causes a more copious formation of uric acid. Butcher's meat should therefore be replaced by other albuminous substances, such as peptones, casein, or aleuronat, this last being a vegetable albumin, sometimes used as a substitute for bread. The effect of this treatment is to bring about a great reduction in the amount of the uric acid.

APRIL 11TH.

Hepatic Colic of Nervous Origin.

Hepatic neuralgia is not very rare, but is often confounded with gall-stone colic; it has even happened that in a case of neuralgia a surgical operation has been performed owing to a wrong diagnosis. According to Professor Fürbringer, in neuralgia the pain is principally localised in the substance of the liver, whilst in gall-stone colic it is of a more diffused character. The duration of an attack varies from ten minutes to four hours. At the end of an attack vomiting is frequent, just as in gall-stone colic, and jaundice has also been observed. The regularity of the attack and the connexion with menstruation are valuable diagnostic symptoms. The disease being a visceral neurosis due to hysteria or neurasthenia the treatment should consist of a strengthening diet, together with a cautious use of appropriate anodynes.

Gouty Affection of the Heart.

Professor SCHOTT (Nauheim) said that the heart diseases associated with gout were first described by Fothergill. Many writers still deny that there is a connexion between gout and heart disease, but Professor Schott has himself observed stenosis of the aorta and myocarditis, as well as sensory and motor neuroses of the heart, which were all undoubtedly due to the gouty diathesis. Cardiac complications often happen in secondary gout, where the stomach, kidneys, and nervous system are affected. The association of gout with anæmia, chlorosis, diabetes, and chronic lead-poisoning sometimes proves disastrous to the heart.

Other Papers.

Considerations of space permit only a passing reference to the other papers read at the final meeting of the Congress, the principal of them being those by Professor OTT (Prague) on the Amount of Albumin in Pathological Fluids, by Professor LEUBUSCHER (Jena) on the Connexion of Heart Diseases with Affections of the Nervous System, by Professor UNVERRICHT (Magdeburg) on the Treatment of Tuberculous Pneumothorax, and by Dr. BLUM (Frankfort) on Enemata of Oil in Gall-stone Colic.

Medical News.

UNIVERSITY OF DURHAM: FACULTY OF MEDICINE.—At the Convocation held on April 25th the following gentlemen were recommended for the degrees indicated below:—

Degree of M.D. for Practitioners of Fifteen Years' Standing.—Ernest Blacker, M.R.C.S., L.R.C.P., Francis Wheeler Brown, M.R.C.S., L.S.A., John Davies, M.R.C.S., L.S.A., Benjamin Thompson Lowne, F.R.C.S., L.S.A., Robert Mackinlay, L.R.C.P. Edin., L.F.P.S. Glas., Charles Edwin Matthews, M.R.C.S., L.R.C.P., and William Samuel Mavor, M.R.C.S., L.R.C.P.

Degree of M.D.—Burdon Cox, M.B., B.S. Durh., Henry King Dawson, M.B., B.S. Durh., Ebenezer William Diver, M.B. Durh., Frank Hawthorne, M.B., B.S. Durh., Joseph William Leech, M.B., B.S. Durh., Charles Newton Lovely, M.B., B.S. Durh., Henry John Mathews, M.B. Durh., Robert William Morgan, M.B., B.S. Durh., Ogden Watson Ogden, M.B., B.S. Durh., and Samuel Short Whillis, M.B., B.S. Durh.

Degree of M.B.—Honours—Second Class: Vincent Burrow, M.R.C.S., L.R.C.P., St. Mary's Hospital; Edward Harvey Sutcliff, St. Thomas's Hospital; Thomas Streatfeild, M.R.C.S., L.R.C.P., University College Hospital; George Hedley Tomlinson, M.R.C.S., L.R.C.P., and Frank Laughton-Smith, M.R.C.S., L.R.C.P., Mason College, Birmingham; and Thomas Brice Poole, M.R.C.S., L.R.C.P., and Frederick William Rowland, M.R.C.S., L.R.C.P., Guy's Hospital.—Pass List: Percy Luke Armstrong, Leslie Davidson, William Thomas Harkness, Hugh Meyrick Meyrick-Jones, M.R.C.S., L.R.C.P., Herbert Newsome, and William Hunter Richards, College of Medicine, Newcastle-upon-Tyne; John Dee Shapland, B.A. Cantab., University College Hospital; Charles Henry Dickens and Lewis William Richards, M.R.C.S., L.R.C.P., St. Thomas's Hospital; Edward Walter Joscelyne, L.S.A., St. Mary's Hospital; and Charles Holmes Joy and William Henry Whitehouse, Mason College, Birmingham.

Degree of B.S.—Percy Luke Armstrong, Leslie Davidson, William Thomas Harkness, Hugh Meyrick Meyrick-Jones, M.R.C.S., L.R.C.P., Herbert Newsome, and William Hunter Richards, College of Medicine, Newcastle-on-Tyne; Vincent Burrow, M.R.C.S., L.R.C.P., St. Mary's Hospital; Charles Holmes Joy, Frank Laughton-Smith, M.R.C.S., L.R.C.P., George Hedley Tomlinson, and William Henry Whitehouse, Mason College, Birmingham; Thomas Brice Poole, M.R.C.S., L.R.C.P., and Frederick William Rowland, M.R.C.S., L.R.C.P., Guy's Hospital; Lewis William Richards, M.R.C.S., L.R.C.P., St. Thomas's Hospital; and Thomas Streatfeild, M.R.C.S., L.R.C.P., and John Dee Shapland, B.A. Cantab., University College Hospital.

Degree of B. Hyg.—Arthur Edward Thompson, M.B., B.S. Durh.

Diploma in Public Health.—Walter Reyner Brunton, M.B., M.R.C.S., L.R.C.P.

In the third examination for the degree of Bachelor in Medicine under the new regulations the following candidates have satisfied the examiners:—

Second-class Honours.—Albert Gathorne Widdowfield Pearson, College of Medicine, Newcastle-upon-Tyne.

Pass List.—Percy Holgate, Walter Herbert Lister, John Lowry, and William Simpson, College of Medicine, Newcastle-upon-Tyne.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At the April sittings of the examiners in

Glasgow the following candidates passed the respective examinations, those marked with an asterisk (*) passing "with distinction":—

First Examination: Five Years' Course.—*John Campbell Douglas, Greenock; John B. Conner, Greenock; William A. Ogilvie, Cam, buslang; Charles M'Donnell, Limerick; Edward Michael M'Swiney-Limerick; John Thomas Bradley, Clare; Percy J. Bateman, Cork; Gerald S. Coghlan, Longton; John George Grant, London; and *Daniel Michael Donovan, Cork.

First Examination: Four Years' Course.—Frederick George Henderson, Dinapore, India; Louis R. St. Romaine, Calcutta; Alexander E. Crabbe, Aberdeen; John R. Dodds, Darlington; and Charles K. Darnell, Rugby.

Second Examination: Five Years' Course.—*Henry Stewart Anderson, Dunmurry; Alexander Macgregor, Glasgow; William Hutton, Greenock; John Dick, Greenock; Robert W. Jubb, Lowestoft; *Richard Steward, Northfield; James M. Inverarity, Dundee; James Dunlop, Glasgow; William Carey, Glasgow; Thomas D. Bird, Woodford; Harry G. Ogilvie, Jamaica; William J. Aiken, Tyrone; James T. O'Connor, Cork; and Edward H. Harrison, Belfast.

Second Examination: Four Years' Course.—Charles F. Spinkes, Cheshire; Robert M. Quin, Portadown; Tom J. Lumley, Northumberland; Richard E. Roberts, Carnarvonshire; Frederic Lilley, Belfast; James H. Stuart, County Antrim; Mary Ann Handson, Lincolnshire; John Boyd, Kilrea; Michael L. Neylon, Victoria; Farris N. Jaboor, Syria; John G. Gibson, New Cumnock; Montague V. M'Kechnie, Witton Park; Ellis Owen Jones, Carnarvon; James H. Fleming, Avondale; Christopher R. White, Jamaica; and John L. M. Govan, Woolwich.

Third Examination.—Andrew M'Credie, Stranraer, and James M'Glynn, Tyrone.

Final Examination, and admitted Licentiate of the three Coöperating Colleges.—George Henderson, Coatbridge; Ernest Edward Crowther, Luddenden; David Smith Henderson, Coatbridge; James Morrison, Belfast; Patrick James Calnan, Cork; Mark O'Brien, Ballincollig, County Cork; William Herbert Richardson, Manchester; Annie Christina Sutherland, Bo'ness; Charles Ayton Marrett, London; Daniel Villesid, Belfast; Daniel Morrisey, Passage West, County Cork; Arthur John Pollard, Headingley, Leeds; and Alfred Hamman, Knutsford, Cheshire.

FOREIGN UNIVERSITY INTELLIGENCE. — *Halle:* Dr. Schwartze has been promoted to the position of Honorary Professor of Otology.—*St. Petersburg (Military Medical Academy):* Dr. Boris Verkhovski has been recognised as *privat-docent* in Otology and Rhinology.—*Tübingen:* Dr. W. Küster has been recognised as *privat-docent* in Physiological Chemistry.—*Vienna:* Dr. Leopold Müller has been recognised as *privat-docent* in Ophthalmology.

CHEMISTS' AND DRUGGISTS' EXHIBITION. — The editor of the *British and Colonial Druggist* informs us that in consequence of the success of the practical exhibition of pharmaceutical products and the products of the drug, chemical, and allied trades, which he arranged last year, he is arranging a similar exhibition for next August.

THE annual meeting of the Metropolitan Nursing Association was held on Tuesday last at Grosvenor House under the presidency of the Earl of Strafford. The report gave evidence of much useful work, the number of cases nursed during the year having been 1468. The income for the year was £1890, and exceeded by a little more than £200 the annual expenditure.

HUNTERIAN SOCIETY.—A meeting of this society was held on April 22nd. Mr. Targett gave a Lantern-slide Demonstration of the Changes which occur in the Joints in Charcot's Disease and Syringo-myelia, and pointed out that the lower extremity was chiefly affected in the former disease and the upper extremity in the latter.—Mr. Eve showed specimens of Distortion of the Foot with Trophic Changes in the Joints and Hands from Peripheral Neuritis.—Mr. Cotman brought forward a patient who had an Unusual Condition of the Ankle-joint following a sprain of a year ago; there was an increase in the swelling.—Mr. Charters J. Symonds mentioned the case of a patient who with distinct symptoms of Locomotor Ataxy had Four Perforating Ulcers on his feet, in one of which he had removed the carious head of a metatarsal bone, with successful healing of the ulcer in a fortnight. Curetting of another ulcer had failed, the joint not having been entered. In another patient he removed the head of a carious metatarsal bone with success. He does not consider it always necessary to amputate. The cases may be left alone for long periods.—Dr. Fortescue Fox attributed difference of joints affected in Charcot's disease and in syringo-myelia to the pressure of body weight in the former and to the liability to injury and to degenerate changes of shoulder-joint in the latter, suggesting thus a certain parallelism between syringo-myelia and traumatic or local arthritis.—Dr. Horrocks referred to a case where the removal of a band pressing on the cauda equina in a case of spina bifida occulta had removed symptoms in the feet.—Mr. Targett replied.

THE ROYAL NATIONAL HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, VENTNOR.—A dinner in aid of the funds of this institution was held on April 29th in the Whitehall Rooms of the Hôtel Métropole. Sir Richard Webster, Q.C., M.P., was in the chair and was supported by a large and distinguished company. Donations to the amount of £1800 were announced.

THE ROYAL AMATEUR ORCHESTRAL SOCIETY.—A very successful afternoon concert was given in the large room of the Queen's Hall, Langham-place, on May 2nd by the Royal Amateur Orchestral Society for the benefit of the funds of St. Thomas's Hospital. The members of the orchestra played the "Overture from Oberon," the "Overture from Tannhäuser," the "Ungarische Rhapsodien, No. 1," and other pieces with the skill for which they are renowned. Madlle. Irme Sethe (violin), Madame Fanny Moody, Mr. Andrew Black, and Monsieur Sapellnikoff also assisted and were well received. As the room was crowded, every seat having been taken before the day of the performance, we hope that the hospital will receive a considerable sum as the result. Much credit is due to Dr. Toller and those engaged in the preparation of the entertainment.

THE DERMATOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND.—An ordinary meeting was held on April 22nd, Dr. P. H. Pye-Smith, F.R.S., President, being in the chair. Dr. Robert J. Carter, Mr. J. Jackson Clarke, and Dr. C. H. Thompson were elected members of the society. The following cases were exhibited:—By the President: A Symmetrical Pustular Eruption resembling that produced by an Iodide (an unknown medicine having been taken previously to admission into hospital) in a male patient aged fifty-two years, who was suffering from aortic valvular disease.—By Dr. P. S. Abraham: (1) Lichen Planus having unusual Characters on the Legs and Forearms of a Female. (2) Multiple Subcutaneous Tuberculous Nodules in a Girl aged three and a half years; (3) Extensive Dermato-syphilis of Nodular Form of Ten Years Duration in a Woman aged fifty-three years; and (4) Dermato-syphilis of Squamous Form in Two Females aged sixty and forty-three years respectively.—By Mr. L. A. Bidwell: A Boy aged eight years with Persistent Œdema of the Upper Lip of Three Years' Duration commencing with Ulceration inside one Nostril and at the Angles of the Mouth.—By Dr. A. Eddowes: (1) Xerodermia in a Boy specially to illustrate the limitation of the efficacy of thyroid extract as a treatment; and (2) a Girl with Peculiar Œdema of the Right Ear and Cheek, sometimes accompanied by Swollen Eyelids.—By Dr. T. D. Savill: Keratosis Follicularis in a woman aged fifty-eight years.—By Dr. Stowers: (1) Lichen Planus Hypertrophicus in a woman aged sixty-four years; (2) a Papulo-tubercular Dermato-syphilide of Universal Distribution in a woman aged thirty-nine years; and (3) an Unusual Facial Eruption due to the apparent coexistence of Acute Sebacea and Dermato-syphilis.—The President, Dr. Abraham, Mr. Bidwell, Dr. Bowles, Dr. A. Davies, Dr. Eddowes, Mr. Hitchens, Dr. Pegler, Dr. Savill, Dr. Stopford Taylor (Liverpool), and Dr. Stowers took part in the various discussions. It was announced that the annual general meeting and conference would be held on Wednesday, May 20th, full particulars of which would be sent to each member.

THE DIFFUSION OF SMALL-POX.—There were registered in the metropolitan area last week two deaths from small-pox. The deceased persons belonged respectively to Holborn and Newington sanitary districts. The previous deaths from small-pox in London were 2 registered in the first week of March. The cases admitted to hospital last week were only 3 in number, against 5, 4, and 8 in the three preceeding weeks. On Saturday last there remained in hospital only 13 cases of the disease, as compared with 51 and 33 on the corresponding Saturdays of the two previous months. The only other registered death from small-pox in the thirty-three large towns was one at West Ham. There have been several cases recently in Sussex, chiefly in common lodging houses, and in each instance prompt measures of isolation have prevented the spread of infection. Among the cases was one in a tramp from Gloucester, who was staying in a public-house in the hamlet of Hermitage, near Emsworth, and who had the disease in a mild form. The landlord and two other persons have since been attacked, but have been isolated and are now convalescent. A vagrant lad is under treatment in an unoccupied cottage

at West Grinstead, in the Horsham rural district. At Gloucester there are signs of waning in the epidemic, the cases in the week ended April 30th having been only 130 as compared with 211, 201, and 168 in the three preceding weeks, while the decline is still maintained. We sincerely trust that the city will shortly be free from its terrible infliction. The fall chronicled was to be expected in view of the activity of the local authorities in carrying out vaccination and revaccination throughout the place. The Gloucester School Board have decided to keep the schools closed until the end of the present month. At a recent special meeting of the Malmesbury Town Council a report was presented by the sanitary officials showing that the case of small-pox found in the place was of mild form in a vaccinated youth, that the patient had been removed to hospital, and that all persons who had come in contact with him had been isolated. No cases have since appeared, and the patient is himself convalescent. A case has occurred at Chew Stoke in the Clutton Union, Neath. In Yorkshire 3 cases have occurred in the North Bierley district. Three men who had been lodging in Bradford fell ill with small-pox, one of them having come from Gloucester. They were removed to hospital, one to Schole Moor Hospital, where he died, and two to Bierley Hall Hospital. The brother of the deceased, who attended his funeral, contracted the disease, from which he also died.

Parliamentary Intelligence.

CURRENT NOTES.

The London Water Question.

IN the House of Lords on Thursday, April 30th, there was a long debate on the motion for the second reading of the Government Bill for the establishment of a new water authority for London and the adjoining counties. Lord Tweedmouth moved an amendment to reject the Bill merely on the ground that it takes away the powers of the London County Council, but the House by 98 votes to 27 passed the second reading.

Poor-law Officers' Superannuation Bill.

This Bill is now in so advanced a position and has met with so much favour at the hands of the Government and the House of Commons that it has every prospect of being passed into law before the end of the present session. Its consideration by the Grand Committee on Law occupied a single sitting, and the only amendment of any consequence made was one moved by Mr. T. W. Russell, Parliamentary Secretary to the Local Government Board, providing that resignation as well as dismissal on account of fraud or grave misconduct shall carry with it forfeiture of all claim to a superannuation allowance.

Infant Life Protection Bill.

The Select Committee of the House of Lords on this Bill continues to meet twice a week for the examination of witnesses. Their lordships are quickly bringing together a large body of evidence in favour of extending the present system of registration to persons who take in a single child at a time and continuing the supervision until the child reaches the age of five years. They have examined several officials of the London County Council connected with the administration of the Infant Life Protection Act, several coroners, Mr. Rudolf, Secretary of the Church of England Waifs and Strays Society, and others. A Bill entitled the Safety of Nurse Children Bill has been introduced by Lord Herschell and referred to the committee for their consideration. The promoters of the measure are the National Society for the Prevention of Cruelty to Children.

Midwives Registration Bill.

The promoters of this Bill obtained a place for its second reading among the orders on Wednesday, May 6th, but the Government, in virtue of a recent resolution, put business of their own in front of it and consequently it was not reached at a period of the sitting when it could be discussed. The result is that there is little or no chance of the Bill being discussed this session. The petition of the British Medical Association against the Bill was presented to the House on Tuesday, May 5th.

The Ingredients of British Cigars.

Mr. Gilliat called the attention of the Chancellor of the Exchequer to a statement that in the East of London yellow chestnut leaves were largely used during autumn in the manufacture of British cigars.—The Chancellor of the Exchequer replied that the horrible suggestion had no better basis than a newspaper paragraph. Under the official supervision which exists at present no such operations as those described could be carried on by any licensed manufacturer, and there was no reason to suppose that they were practised by persons not holding a licence.

HOUSE OF COMMONS.

FRIDAY, MAY 1ST.

The Case of Dr. Herz.

In the course of a debate in Committee of Supply on a vote for certain miscellaneous legal expenses, several members called attention to the case of Dr. Herz, complaining that the proceedings against that gentleman had been unduly prolonged and that a great deal of unnecessary expense had been incurred.—Dr. Clark insisted that what had occurred had amounted to persecution.—Sir Matthew White Ridley said, in his reply, that he was quite conscious that the case had cost a great deal of money, although it had been called for partly under our treaty obligations with the French Government and partly by merciful consideration for Dr. Herz himself.—Mr. Lloyd George: Why has the prosecution not been withdrawn?—Sir M. White Ridley: It is for the French Government to withdraw it. We simply fulfil our treaty obligations to France.—Mr. Lloyd George: I do not believe that any treaty compels us to persecute a man who is suffering from heart disease and is on the brink of death by placing a policeman at his door.—Sir M. White Ridley: There is no policeman at the door; he is solely in charge of his own doctor.

MONDAY, MAY 4TH.

Insanitary Barracks.

Mr. Colston asked the Under-Secretary of State for War if he was aware that for the past two years and upwards the sewage from the Le Marchant Barracks, near Devizes, had, owing to a complete breakdown of the sewerage system provided there, been discharged in a crude state into the Kennet and Avon Canal about a mile from the town, and that the canal flows downwards from that point through the town and supplies the water for a public bathing place for the inhabitants; and whether, having regard to the serious danger to health and the annoyance that had arisen, he would forthwith take such measures as were necessary to abate the nuisance.—Mr. Brodrick replied that the measures contemplated in the reply made to his honourable friend a year ago were duly carried out, but from the nature of the subsoil and other circumstances they had not been successful. The case was not quite so bad as represented in the question, for no actual sewage passed to the canal from the barracks, as the latrines were on the dry earth system. The general officer commanding had been given full authority to take any necessary measures and no efforts would be spared to provide a full remedy for the existing admitted evil. The co-operation of the local authorities was needed and had been invited.

BOOKS, ETC., RECEIVED.

ALCAN, FELIX, Paris.

Manuel de l'Enseignement des Enfants Anormaux. Par Drs. Hamon du Fougeray et L. Coustoux. Preface du Dr. Bourneville. 1895.

Traitement des Maladies des Femmes par l'Électricité. Par Dr. L. R. Regnier. Preface par Dr. Labadie-Lagrave. 1896.

BAILLIERE, TINDALL, AND COX, King William-street, Strand, London.

The Diagnosis and Treatment of Diseases of the Rectum. By William Allingham, F.R.C.S., and Herbert W. Allingham, F.R.C.S. Sixth edition. 1896. Price 12*s.* 6*d.*

On Extraction, with Notes on the Anatomy and Physiology of the Teeth. By W. D. Woodburn, L.D.S. 1896. Price 5*s.*

BELL, GEO., AND SONS, York-street, Covent-garden, London.

Biological Experimentation: Its Functions and Limits. By Sir Benjamin W. Richardson, M.D., F.R.S. 1896. Price 2*s.* 6*d.* net.

CASSELL AND COMPANY, London.

Surgical Diseases of the Ovaries and Fallopian Tubes, including Tubal Pregnancy. By J. Bland Sutton, F.R.C.S. Illustrated. New Edition. 1896. Price 21*s.*

A System of Surgery. Edited by Frederick Treves, F.R.C.S. Vol. II. Illustrated. 1896.

CHAPMAN AND HALL, Henrietta-street, Covent-garden, London.

A Compendium of General Botany. By Dr. Max Westermaier. Translated by Dr. A. Schneider. Illustrated. First Edition. 1896. Price 8*s.* 6*d.* net.

Handbook for the Bio-chemical Laboratory, including Methods of Preparation and Numerous Tests arranged alphabetically. By John A. Mandel. First Edition. 1896. Price 6*s.* 6*d.*

CHURCHILL, J. & A., Great Marlborough-street, London.

Sterility. By Robert Bell, M.D. 1896. Price 5*s.*

CORNISH BROTHERS, Birmingham.

A Course of Practical Chemistry for Medical Students, as prescribed by the Conjoint Board, London. Arranged by C. F. Baker. 1896. Price 2*s.* 6*d.* net.

DIGBY, LONG, AND CO., Bouverie-street, Fleet-street, London.

Boer and Uitlander: The True History of the late Events in South Africa. By Wm. F. Regan. With original portraits, map, and plan. 1896.

EYRE AND SPOTTISWOODE, London.

Official Copy. University of London. The Calendar for the Year 1896-97. Part I. Charters, Regulations, Lists, &c. 1896. Price 3*s.*

GRIFFIN, CHAS., AND CO., Exeter-street, Strand, London.

Foods: Their Composition and Analysis. By A. Wynter Blyth, M.R.C.S. Illustrated. Fourth Edition. 1896. Price 21*s.*

KEGAN PAUL, TRENCH, TRÜBNER AND CO., London.

Character as Seen in Body and Parentage. By F. Jordan, F.R.C.S. Third edition. 1896. Price 2*s.* 6*d.* net.

LONGMANS, GREEN, AND CO., London.

Occasional Papers on Medical Subjects, 1855-1896. By W. Howship Dickinson, M.D., F.R.C.P. 1896. Price 12*s.*

The Essentials of Chemical Physiology. By W. D. Halliburton, M.D., F.R.S. Second Edition. 1896. Price 5*s.*

Quain's Elements of Anatomy. Edited by Edward A. Schäfer, F.R.S., and Geo. D. Thane. In three volumes. Appendix. Superficial and Surgical Anatomy. Tenth edition. 1896. Price 6*s.* 6*d.*

MALOINE, A., Paris.

Nouveaux Elements d'Ophtalmologie. Par H. True and E. Valude. Tome premier. 1896.

PUTNAM'S SONS, G. P., Bedford-street, London.

No. 32 State Charities Aid Association of New York: Handbook for Hospitals. By Abby H. Woolsey. Third Edition. 1895. Price 5s. 6d.

SAUNDERS, W. B., Philadelphia.

Obstetric Accidents, Emergencies, and Operations. By L. C. Boisliniere, A.M., M.D., LL.D. Illustrated. 1896.

SWAN SONNENSCHEIN AND Co., London.

Analytic Psychology. By G. F. Stout. In two volumes. Vols. I. and II. 1896.

THE REBMAN PUBLISHING COMPANY, Adam-street, Strand, London.

Archives of Clinical Skiagraphy. By Sydney Rowland, B.A. Camb. 1896. Prices: Archives, 4s. net; Portfolio, 2s. net.

The Year-Book of Photography and Amateurs' Holiday Guide; Vol. XXXVII., 1896 (The Photographic News, 22, Furnival-street, London, E.C.); price 1s.—Monatsschrift für Geburtshülfe und Gynäkologie; Band III., Heft 4; April, 1896 (Williams and Norgate, Henrietta-street, Covent-garden, London).—An Address on some of the Limitations of Medicine; by Jas. F. Goodhart, M.D. Aberd., F.R.C.P. Lond.; reprint (John Bale and Sons, Great Titchfield-street, Oxford-street, London, 1895).—The Conservative Value of the Play Impulse; by Irving C. Rosse, M.D.; reprint (Damrell and Upham, Washington-street, Boston, 1895).—Dress and Health: An Appeal to Antiquity and Common Sense; by Chas. M. Jessop, M.R.C.P. Lond. (Elliot Stock, Paternoster-row, London, E.C., 1896).—Medical and Surgical Report of the Presbyterian Hospital in the City of New York; Vol. I., January, 1896 (The Knickerbocker Press, New York).—Scientific Memoirs by Medical Officers of the Army of India; edited by Surgeon-Major-General J. Cleghorn, M.D.; Part 9, 1895 (Office of the Superintendent of Government Printing, India, Calcutta, 1895).—Transactions of the American Climatological Association for the Year 1895; Vol. XI. (printed for the Association, Philadelphia, 1895).—Handbuch der Laryngologie und Rhinologie; von Dr. P. Heymann; 1. Lieferung (1-1) (Alfred Holder, Wien, 1896).—Ueber Traumatische Entstehung Innerer Krankheiten; von Dr. Richd. Stern; Erstes Heft (G. Fischer, Jena, 1896).—Philip's Handy Volume Atlas of London, 1896 (Geo. Philip and Son, 32, Fleet-street, London, E.C.); price 5s.—Royal University of Ireland Examination Papers, 1895: A Supplement to the University Calendar for 1896 (printed at the University Press by Ponsonby and Weldrick, Dublin).—Dod's Parliamentary Companion, 1896 (Whittaker and Co., White Hart-street, London, E.C.); price 4s. 6d.—Willing's British and Irish Press Guide, 1896 (published at 162, Piccadilly, London, W.); price 1s.—Amicus Medici; Prescription Form and Letter Case (Daniel Macfarlane and Co., Edinburgh).—Transactions of the Obstetrical Society of London; Vol. XXXVIII., for the year 1896; Part I. for January and February (published by the Society, 20, Hanover-square, W.); price 5s.—The Journal of Physiology; Vol. XIX., No. 4 (C. J. Clay and Sons, London; 1896); price 8s.—The Glasgow Medical Journal; May, 1896 (A. MacDougall, Glasgow, and H. K. Lewis, London); price 2s.—Henderson and Birkett's Medical Visiting and Account Book (Henderson and Birkett, Booksellers, Gateshead.—Magazines &c., for May: Strand Magazine, Boys' Own Paper, Girls' Own Paper, Leisure Hour, Sunday at Home, Ludgate Magazine, Westminster Review, Contemporary Review, Friendly Greetings, Light and Leading, Architecture.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

BENSON, J. R., M.R.C.S., L.R.C.P. Lond., has been appointed Resident House Surgeon to King's College Hospital.

BOND, C. S., M.B., B.C. Camb., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant Medical Officer for the Infirmary, Parish of St. Luke, Chelsea.

BOSTOCK, A. S., M.R.C.S., has been reappointed Medical Officer by the Westhampnett Rural District Council.

BURRIDGE, H. A., M.R.C.S., L.R.C.P. Lond., has been appointed Resident House Surgeon to King's College Hospital.

CARMICHAEL, D., M.B., C.M. Edin., has been appointed Medical Referee in the Boldam District for the Prudential Assurance Company.

COUCH, J. G., M.R.C.S., has been reappointed Medical Officer of Health for the Madron and Ludgvan Urban Sanitary Districts.

DARLEY, A. R., M.D., B.Ch. Dub., L.M.R.C.P. Irel., has been appointed Medical Officer of Health for the Daventry Rural Sanitary District, vice W. J. F. Churchouse.

DOCHARD, A. T., M.B., C.M. Edin., has been reappointed Medical Officer of Health for the Whitefield Urban District.

ENHARDT, C. C. J., M.R.C.S., L.R.C.P. Lond., has been appointed Resident House Surgeon to King's College Hospital.

EVANS, ARTHUR H., L.R.C.P. Lond., M.R.C.S., has been appointed Senior House Physician to Westminster Hospital.

EWAN, JOHN ALFRED, M.A., M.D. Edin., Senior Assistant Medical Officer, Dorset County Asylum, has been appointed Medical Superintendent of the Asylum about to be built for the Kesteven Division of Lincolnshire. Meantime the patients are to be housed in temporary buildings.

GRIFFITH, WM., M.B., C.M. Edin., has been appointed Consulting Physician to the Pembrokeshire County Infirmary.

HARGREAVES, W. H., M.R.C.S., L.R.C.P., has been appointed Obstetric House Physician to Middlesex Hospital.

HAVARD, D., M.D. St. And., L.R.C.P. Lond., M.R.C.S., D.P.H. Eng., has been appointed Consulting Physician to the Pembrokeshire County Infirmary.

JACOB, F. H., M.R.C.S., L.R.C.P. Lond., has been appointed Resident Assistant House Physician to King's College Hospital.

JOLLY, S. A., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Acton Sanitary District of the Brentford Union, vice F. Francis resigned.

LANSDOWN, G. H., M.R.C.S., L.R.C.P. Lond., has been appointed Resident House Physician to King's College Hospital.

LARKING, A. E., M.D. Durh., M.R.C.S., has been appointed Medical Officer of Health for the Chesham Urban Sanitary District, vice J. F. Churchill, resigned.

MACKENZIE, J., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Kirby Sanitary District of the Basford Union.

MACHALE, P. J., L.R.C.P., L.R.C.S. Irel., has been appointed Medical Officer for the Lahardane Dispensary District, Mayo.

MACQUEENEY, J. R., Dr., has been appointed Consulting Physician to St. Vincent's Hospital, Melbourne, Australia.

MATHIE, J. P., M.B., C.M., L.F.P.S. Glasg., has been appointed Medical Officer to the Bilston Hospital.

MAUDSLEY, H., M.D., B.S. Lond., M.R.C.P., has been appointed Consulting Physician to St. Vincent's Hospital, Melbourne, Australia.

PAPILLON, T. A., F.R.C.S. Edin., has been appointed Ophthalmic Surgeon to the Hastings, St. Leonards, and East Sussex Hospital.

PLAYFAIR, E., M.B. Lond., M.R.C.S., L.R.C.P. Lond., has been appointed Resident House Accoucheur to King's College Hospital.

PLUMMER, SELBY W., M.D., B.S. Durh., has been appointed Honorary Surgeon to the Durham County Hospital.

PRICE, H. P. J., M.R.C.S., has been appointed Consulting Physician to the Pembrokeshire County Infirmary.

RANDALL, W., L.R.C.P. Edin., M.R.C.S., has been reappointed Medical Officer of Health, Bridgend.

REID, D. A., M.D. Edin., M.R.C.S., has been appointed Consulting Physician to the Pembrokeshire County Infirmary.

RICHMOND, JAS., M.B. Oxon., M.R.C.S., D.P.H. Camb., has been appointed Medical Officer of Health for the Perry Bar Urban Sanitary District, vice J. B. Welch, resigned.

ROWELL, GEORGE, F.R.C.S., has been appointed Senior Anæsthetist to Guy's Hospital and Demonstrator of Anæsthetics in the Medical School.

SAUNDERS, E. A., M.R.C.S., has been appointed Consulting Physician to the Pembrokeshire County Infirmary.

SINIGAR, H., M.B. Lond., M.R.C.S., L.R.C.P., has been appointed Assistant Medical Officer to the Birmingham Workhouse Infirmary.

STANLEY, ARTHUR, M.D. Lond., M.R.C.S., L.R.C.P., has been appointed Assistant Medical Officer to the North-Western Hospital of the Metropolitan Asylums Board.

THOMAS, ROBT. STANLEY, M.A., M.B., B.C. Cantab., M.R.C.S. Eng., L.R.C.P. Lond., has been appointed Medical Officer to the Exmouth Dispensary.

TRIBE, P. C. E., M.R.C.S., L.R.C.P. Lond., has been appointed Resident Assistant House Accoucheur to King's College Hospital.

WAINMAN, BENJAMIN, L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Hunslet Workhouse, vice Shirley.

WILLIAMS, WM., M.B. Lond., M.R.C.S., has been appointed Consulting Physician to the Pembrokeshire County Infirmary.

WOODFORDE, W. T. G., M.D. Lond., has been reappointed Medical Officer for the Berks Combined Medical District by the Egham Rural District Council.

ERRATUM.—In our issue of the 11th ult. it was announced in error that Dr. E. Hawkins had been appointed medical officer of health for Sunderland. Of the six *selected* candidates Dr. Hawkins was one, but Dr. H. Scurfield was ultimately appointed.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

ANCOATS HOSPITAL, Manchester.—Resident Junior House Surgeon. Salary £50, with board and washing.

BRISTOL EYE INFIRMARY.—House Surgeon. Salary £60, with board and residence.

BUCKS COUNTY LUNATIC ASYLUM.—Assistant Medical Officer at this asylum, situate at Stone, near Aylesbury; unmarried. Salary £100 per annum, with board and furnished apartments in the asylum.

CHICHESTER INFIRMARY.—House Surgeon. Salary £80 per annum, with board, lodging, and washing.

COUNTY ASYLUM, Dorchester.—Senior Assistant Medical Officer, unmarried. Salary £150, rising to £200.

COUNTY BOROUGH OF GATESHEAD.—Medical Officer of Health for the Borough. Salary £300 per annum, rising by annual increments of £25 to £350 per annum, and an additional salary of £50 per annum as Medical Officer of the Corporation Hospital for Infectious Diseases. The appointment will terminate on the expiration of twelve months. Applications to the Town Clerk, Town Hall, Gateshead.

GLAMORGAN COUNTY ASYLUM, Bridgend.—Junior Assistant Medical Officer. Salary £130, rising £10 a year to £150 if approved, with board (no beer or wine), lodging, and washing.

HORTON INFIRMARY, Banbury.—House Surgeon and Dispenser. Salary £60 per annum, with board and lodging.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton. Assistant Resident Medical Officer. Salary £50 per annum, with board and residence.

KENT COUNTY OPHTHALMIC HOSPITAL, Trinity House, Maidstone.—House Surgeon. Salary, with furnished apartments and attendance in the hospital, but without board, for the first year £125 and £150 after the first year.

LONDON THROAT HOSPITAL, 204, Great Portland-street, W.—Non-resident House Surgeon, for six months. Salary at the rate of 25 guineas per annum.

RANGOON MUNICIPALITY. — Health Officer. Salary Rs. 600 per mensem, rising to Rs.1000 per mensem by annual increments of Rs. 50 per mensem. Applications to Messrs. Ogilvy, Gillanders, and Co., Sun-court, 67, Cornhill, London, E.C.

ROYAL SOUTH HANTS INFIRMARY, Southampton. — Assistant House Surgeon for six months. Gratuity of £10 will be given if found satisfactory.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William-street, West Strand.—House Surgeon. Also Clinical Assistants for six months.

ST. ANDREW'S HOSPITAL FOR MENTAL DISEASES, Northampton.—Junior Assistant Medical Officer, unmarried. Salary £150 per annum, with board, furnished apartments, and washing.

STAMFORD, RUTLAND, AND GENERAL INFIRMARY, Stamford.—House Surgeon, unmarried, for two years. Salary £100 per annum, with board, lodging, and washing.

THE NEW HOSPITAL FOR WOMEN, 144, Euston-road, London.—Two fully qualified medical women as House Surgeons.

THE ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City-road, London, E.C.—House Physician, for six months. Salary at the rate of £40 per annum, with board lodging, and laundry.

THE GENERAL HOSPITAL, Birmingham.—Assistant House Surgeon, for six months. Residence, board, and washing provided.

THE HOSPITAL FOR SICK CHILDREN, Great Ormond-street, Bloomsbury.—Resident Medical Superintendent, for one year. Salary £105 a year, with board and residence in the hospital. Also House Surgeon for six months, unmarried. Salary £20, with board and residence in the hospital.

VICTORIA CHILDREN'S HOSPITAL, Park-street, Hull.—Resident House Surgeon. Salary £50 per annum, with board and laundry.

VICTORIA HOSPITAL FOR SICK CHILDREN. Queen's-road, Chelsea, S.W.—Assistant Physician to the Out-patients for five years. Also House Physician to the In-patients for twelve months. Honorarium £50, and board and lodging in the hospital provided.

Births, Marriages, and Deaths.

BIRTHS.

BLACKLOCK.—On May 1st, at Daisy Bank, Prestwich, Manchester, the wife of John Blacklock, M.D. St. And., of twin sons.

EDGE.—On May 2nd, at Tudor House, Maidenhead, the wife of Arthur Edge, M.B. Lond., of a daughter.

GRANT.—On April 30th, at 8, Upper Wimpole-street, W., the wife of Dundas Grant, M.A., M.D., F.R.C.S., of a son.

HARRIS.—On May 4th, at Sussex-place, Southampton, the wife of A. Wellesley Harris, M.R.C.S., L.S.A., D.P.H., of a son.

HEY.—On May 4th, the wife of H. Darwin Hey, M.R.C.S., L.R.C.P., of Eastfield, Faringdon, Berks, of a daughter.

HURRY.—On April 29th, at Abbotsbrook, Reading, the wife of Jamieson B. Hurry, M.A., M.D. Camb., of a daughter.

MARTIN.—On April 27th, at Bermondsey-square, S.E., the wife of F. G. Clifton Martin, L.R.C.P., M.R.C.S., L.S.A., of a daughter.

WATT.—On May 2nd, at Millbrook, Plymouth, the wife of J. Leslie Watt, M.B. Aberd., of a son.

MARRIAGES.

MICHELS—SCHOELL.—On May 5th, at St. Mary's German Lutheran Church, Cleveland-street, Ernst Michels, M.D., F.R.C.S. Eng., to Hildegard Maria, younger daughter of the Rev. C. Schoell, D.D.

NAPIER JONES—RUSSELL.—On May 1st, at the Church of St. Mary and St. Helen, Neston, Cheshire, by Rev. J. O. Young, M.A., assisted by Rev. Canon Turner, vicar of Neston, Philip Napier Jones, M.R.C.S. Eng., L.R.C.P. Lond., son of the late Major E. Monckton Jones, 20th Regiment, to Annie McLeod, youngest daughter of the late David Russell, M.D., of Neston.

POWELL—GERAGHTY.—On April 28th, at St. Munchin's R.C. Church, Limerick, by the Very Rev. Dr. Shanahard, P.P.V.G., H. F. Powell, J.P., L.R.C.P. & S.E., &c., Nenagh, to Margaret (Maggie), eldest daughter of Michael Geraghty, of Bellefield, Limerick. No cards.

RENTON—HOLMES.—On April 29th, at the Parish Church, Cheltenham, Robert Renton, M.B., C.M. Edin., to Ella Annie, youngest daughter of the late George Holmes, Bennington, Cheltenham.

RICHARDS—TA'BOIS.—On April 30th, at St. Peter's, Highgate-hill, Richard Walter Richards, M.D., of Dolgelly, to Edith, youngest daughter of Frederick William Ta'Bois, of Swains-lane, Highgate.

WILLIAMS—SWIRE.—On April 16th, at St. Andrew's Church, Southport, by the Rev. Henry Evans, B.D., vicar of Pembrey, assisted by the Rev. Grantley C. Martin, M.A., vicar of St. Andrew's, and the Rev. Robert Williams, M.A., vicar of Dolyddelen, Walter Ebner Williams, M.B., C.M. Glasg., of Portmadoc, to Maud, fifth daughter of the late John Swire, A.K.C., Pembrey, South Wales, and niece of Mrs. Hardy and the late Frederick Hardy, M.D., F.R.C.P., Southport.

DEATHS.

DARLING.—At The Hawthorns, 13, Merchiston-place, Edinburgh, on the 1st inst., after a short and severe illness, Janet A. Walker, beloved wife of T. Brown Darling, M.D.

FLANAGAN.—On April 20th, at Portsmouth, James Flanagan, R.N., Deputy-Inspector-General of Hospitals and Fleets (retired), aged 61.

HEALD.—On April 26th, at Hingham, Robert Heald, M.R.C.S., aged 45.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, May 7th, 1896.

Date.		Barometer reduced to Sea Level and 32° F	Direction of Wind	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Maximum Temp Shade	Min. Temp	Rainfall	Remarks at 8.30 A.M.
May	1	30·17	N.	44	40	102	54	40	...	Cloudy
,,	2	30·34	N.E.	46	41	100	53	41	...	Cloudy
,,	3	30·41	N.E.	50	46	106	61	44	...	Cloudy
,,	4	30·43	N.E.	46	42	108	63	38	...	Cloudy
,,	5	30·31	S.W.	52	45	109	66	43	...	Cloudy
,,	6	30·26	E.	51	47	100	63	46	...	Cloudy
,,	7	30·32	N.E.	52	48	110	64	46	...	Hazy

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (11th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M., Ophthalmic 1.15 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.).

TUESDAY (12th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (2 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.).

WEDNESDAY (13th).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.).

THURSDAY (14th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Great Northern Central (Gynæcological, 2.30 P.M.).

FRIDAY (15th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M., Ophthalmic 10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.) Gt. Northern Central (2.30 P.M.).

SATURDAY (16th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

MONDAY (11th).—MEDICAL SOCIETY OF LONDON.—8 P.M. General Meeting for the Election of Officers and Council.—8.30 P.M. Dr. A. McLane Hamilton (New York): The Connexion of Auto toxis with certain Common Forms of Insanity.

SOCIETY OF ARTS.—8 P.M. Mr. J. Swinburne: Applied Electro-Chemistry. (Cantor Lecture.)

TUESDAY (12th).—ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. W. Edmunds and Mr. C. A. Ballance: Observations and Experiments on Intestinal and Gastro-Intestinal Anastomosis. (Illustrated by lantern slides.)

SOCIETY OF ARTS.—8 P.M. Mr. W. B. Gardner: Wood Engraving as Compared with other Reproductive Art, and its Future as a Fine Art.

WEDNESDAY (13th).—LARYNGOLOGICAL SOCIETY OF LONDON (20, Hanover-square, W.).—5 P.M. Report of the Morbid Growths Committee on (1) Myxoma of Vocal Cord shown by Dr. Bond; (2) Myxoma of Vocal Cord shown by Dr. St. Clair Thompson; (3) Tuberculosis of the Septum shown by Dr. W. Hill. Cases and Specimens: Dr. B. Baron: Obstruction of Larynx due to a Web.—Dr. F. Semon: (1) Case of Thyrotomy for Epithelioma of the Larynx; (2) Case of Periodical Tracheal Bleeding.—Dr. Bond: (1) Boy with Uncontrollable, Intermittent, Laryngeal Cry; (2) Man, aged forty-five, with Tubercle of Larynx.—Dr. H. L. Lack: (1) Case and Microscope Specimen of Healed Tuberculous Laryngitis in a Female; (2) Case and Microscope Specimen of Lupus affecting only the Pharynx in a Man aged thirty-four; (3) Case of Healed Suppuration of the Left Frontal and Maxillary Sinuses in a Female.—Dr. H. Tilley: Cases and Specimens of Cured Polypi of Frontal Sinuses.—Dr. S. Spicer: Case.—Dr. Brady (Sydney): Instrument.

SOCIETY OF ARTS.—8 P.M. Mr. E. W. Moir: Tunnelling by Compressed Air.

THURSDAY (14th).—SOCIETY OF ARTS.—4 30 P.M. Mr. G. W. Christison: Tea Planting in Darjeeling.

BRITISH GYNÆCOLOGICAL SOCIETY (20, Hanover square, W.)—8 30 P.M. Specimen:—Dr. Schacht: Unruptured Tubal Gestation containing Fœtus. Papers:—Dr. Bell (Glasgow): The Treatment of Carcinoma of the Uterus, Certain Forms of Ovarian Disease, and Fibroids of the Uterus by means of Thyroid, Parotid, and Mammary Gland Therapeutics.—Mr. B. Jessett: The Early Diagnosis of Malignant Disease of the Body of the Uterus, illustrated by Museum Specimens.

FRIDAY (15th).—EPIDEMIOLOGICAL SOCIETY OF LONDON (11, Chandos-st., Cavendish-sq.).—8 P.M. Dr. G. Reid: Infectious Sore-throat and Diphtheria.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY (11th).—LONDON POST-GRADUATE COURSE.—Roy. Lond. Ophthalmic Hospital, Moorfields, 1 P.M., Mr. W. Lang: Lacrymal Affections.—London Throat Hospital, Gt. Portland-st., W., 8 P.M., Dr. E. Law: Examination of the Nose and Throat.

WEDNESDAY (13th).—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3 P.M. Lecture by Dr. Beevor.
HOSPITAL FOR CONSUMPTION, &c. (Brompton).—4 P.M. Dr. Habershon: Mitral Stenosis.
LONDON POST-GRADUATE COURSE.—Hospital for Skin Diseases, Blackfriars, 4.30 P.M., Dr. Payne: Pemphigus.—Roy. Lond. Ophthalmic Hospital, Moorfields, 8 P.M., Mr. A. Q. Silcock: Diseases of Retina, with cases.

THURSDAY (14th).—LONDON POST-GRADUATE COURSE.—Brit. Inst. of Preventive Medicine, Gt. Russell-st., W.C., 3.30 P.M., Dr. Allan Macfadyen and Mr. A. G. Foulerton: Proteid Substances found in Urine in Disease.—Central London Sick Asylum, Cleveland-st., W., 5.30 P.M., Dr. S. Mackenzie: Clinical Lecture.
VICTORIA HOSPITAL FOR CHILDREN (Tite-street, S.W.).—4 P.M. Mr. D'Arcy Power: Meningitis in its Surgical Aspects.

FRIDAY (15th).—LONDON POST GRADUATE COURSE.—King's College, 3 to 5 P.M., Prof. Crookshank: Examination of Air, Soil, and Water.
CENTRAL LONDON THROAT, NOSE, AND EAR HOSPITAL.—4 P.M. Mr. W. Wingrave: On other Diseases of the Throat and Nose.

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

VIEWING THE BODY: A QUERY.

To the Editors of THE LANCET.

SIRS,—Will you kindly answer the following question in your coming number? Is it necessary that the coroner as well as the inquest jury should view the body at an inquiry? I am, Sirs, yours truly,

April 30th, 1896. LEX.

*** There is no doubt that the coroner is as much bound to view the body as the jury. The words of the Coroners Act, 1887 (which is a Consolidation Act), Clause 4, are, "The coroner and jury shall at the first sitting of the inquest view the body."—ED. L.

MONTHLY NURSES AND THE ADMINISTRATION OF ERGOT.

MR. A. BRAXTON HICKS held an inquiry at the Albany Hall, Kingston, touching the death of the newly-born child of John Goodwright. The jury returned a verdict that death was due to the carelessness of Nurse Walker in administering ergot of rye without the advice of the medical man. On arriving the medical man found that his ergot bottle was empty and that the mother had symptoms of an overdose: she was in a state of collapse, the extremities were cold, and the breathing was short and quick. She had to be delivered under chloroform with forceps by Mr. Mackeson. At first the nurse flatly denied having given the ergot; subsequently she admitted having done so. Worse still, she had practised other methods for hastening delivery by kneeling twice on the patient, who was found by Mr. Mackeson to be extensively bruised on the abdomen, over the breast bone, and the last three ribs. Such ignorance and such conduct in a nurse with a certificate from Queen Charlotte's Lying-in Hospital is almost incredible. The element of character, too, assumes great importance in the case. It is well that the mother, under able medical treatment, was saved, or the nurse would have found herself in a very serious predicament.

"A NOVEL METHOD OF INTRODUCING A NEWLY-QUALIFIED MAN."

To the Editors of THE LANCET.

SIRS,—It seems to be particularly unfortunate just now, when the members of the medical profession appear to be waking up to the necessity of standing shoulder to shoulder, that cases such as that related by "Vindicator" in THE LANCET of April 25th should occur. It is no wonder that the public take advantage of us, and by reason of our insane rivalries are enabled to deprive us of our just dues. It shows the necessity of some such association as that which the lawyers have, by which a more strict watch would be kept over the action of its members than the General Medical Council is enabled to do. What appears to me to be most important is—first, a reform of the system of election to the General Medical Council, by which all the members should be elected by the general body of the profession; and secondly, that more power should be given to the General Medical Council in cases in which unprofessional conduct, such as advertising, &c., is indulged in. It would be well if members of the medical profession would join such an association as the Incorporated Medical Practitioners' Association, which is now actively engaged in forming branches all over the country and which can, therefore, bring moral pressure to bear on individuals acting as "Vindicator" describes, and, if necessary, will bring the facts of the case before the corporations who may have granted him diplomas or before the General Medical Council. I am, Sirs, yours truly,

Plymouth, May 5th, 1896. GEO. JACKSON, F.R.C.S. Eng.,
President of the Incorporated Medical Practitioners' Association.

A CORRESPONDENT has sent us a filthy pamphlet entitled "An Essay on the 'Self-Restorer,'" published at 175, Wardour-street, and dated 1895. This pamphlet is written in connexion with a rubbishy apparatus called "Dr. Bell's Self-Restorer Belt," and is a particularly filthy and dangerous example of the quack tract. The person trading at this place under the name of Bell was convicted of using medical titles to which he had no right on Jan. 28th, 1896, at Marlborough-street Police-court (*vide* THE LANCET, Feb. 1st, 1896, p. 310, "A Righteous Judgment"), and we recommend any other of our readers whom this beastliness may reach to forward the pamphlet, envelope, &c., to Scotland-yard, with information as to how it was addressed.

THE CHEMISTRY OF THE BLOOD.

To the Editors of THE LANCET.

SIRS,—In Fownes' "Chemistry" it is stated that "myosin paraglobulin and fibrinogen are readily soluble in dilute acids, but by the act of solution they are at once converted into acid albumin, the precipitate formed by neutralisation being no longer soluble in neutral saline solutions." That from "solutions of acid or alkaline albumin, on careful neutralisation, the whole of the proteid matter is thrown down as a white flocculent, frequently gelatinous precipitate. The action of the acid has converted the albumin soluble in water into a substance insoluble in water. The precipitate is very readily soluble in excess of alkali or dilute acid, and can be reprecipitated by neutralisation. It is insoluble in sodium chloride solution." "Large quantities of acid precipitate it immediately." Again, that "lactic acid coagulates casein." It has been stated that drawn blood decreases in alkalinity while coagulating and that coagulation is prevented by addition of acids or caustic alkali. Can you or any of your readers inform me authoritatively whether, when an organ discharges acid—for example, in rheumatism or gout lactic or uric acid—into the blood during life, a similar or analogous precipitation to that above stated does or does not take place, and whether the disease of blood-clotting ever so arises? Has the effect of alkalies in thrombosis, embolism, or paralysis from clot been noted, and could you refer me to any treatises on the point?

I am, Sirs, yours truly,

May 5th, 1896. B. L. R.

RHEUMATOID ARTHRITIS.

To the Editors of THE LANCET.

SIRS,—The interesting paper by Dr. Bannatyne, Dr. Wohlmann, and Dr. Blaxall in THE LANCET of April 25th recalls to my mind a point in regard to patients suffering from rheumatoid arthritis which I have not seen noticed—namely, their dislike to any warm clothing or covering. This is the more remarkable because it is directly opposed to what we find in sufferers from all other kinds of rheumatism, who know well the value of swathing themselves in flannel. Two well-marked cases of this occur to me. One is that of a woman aged sixty years who has been bedridden with the complaint for over a dozen years, who lives in a cottage in a bleak village in the Midlands, and whose habitual covering is a sheet and counterpane. The other is that of a woman, who died after many years' suffering in early middle life. She absolutely used to refuse to wear any flannel underclothing, and in the depths of winter would retire to rest without any fire in her room, although, owing to her crippled state, it would sometimes take her over a couple of hours to undress and get into bed. On trying to elicit from patients the reason they dislike warm clothing it appears, as far as I can gather, to be not fear of an increase of pain or of sweating, but a dread that it will bring on faintness or syncope, perhaps because the additional warmth would still further stimulate the already too quickly acting heart and tax and distress it. I am, Sirs, yours faithfully,

May 2nd, 1896. WALTER G. EARLE, M.R.C.S.Eng., L.R.C.P. Lond.

WANTED, A SUGGESTION FOR TREATMENT.

To the Editors of THE LANCET.

SIRS,—I have a patient thirty-four years old, strong and healthy, who is a van driver; he has a strong, thick, black beard which he has been in the habit of shaving, which habit he has had to discontinue because of the outbreak of a crop of warts. The warts appeared suddenly about eight weeks since; they extend from the angle of the jaw on the right side to the corresponding one on the left side; they are small in size except a few which have outgrown the others, and they are to be counted by the hundred. Can any reader offer a suggestion for their removal? I am, Sirs, yours truly,

May 4th, 1896. PUZZLED.

H. H., M.D.—The newspaper cutting enclosed by our correspondent contains regrettable matter. But in spite of the fact that the personal information purports to have been given in an interview, we consider it probable that the medical man is suffering from a friend's indiscretion, and has not been himself a party to the dissemination of his praises. Such a practice as the medical man in question has enjoyed was certain to bring him into contact very closely with many persons quite ignorant of medical etiquette, any one of whom might have assisted in the publication of the offending paragraphs from the best of grateful motives.

TOO MANY PARTICULARS.

To the Editors of THE LANCET.

SIRS,—I would like your opinion in the forthcoming issue of THE LANCET on the merits of the following case. A patient of mine died from catarrhal croup who presented all the symptoms of asphyxia; that is, in my opinion, the child died from deficient oxygenation of the blood due to the obstruction in the larynx. Accordingly I filled up my certificate as follows: "Primarily, catarrhal croup; secondarily, carbonic acid poisoning." This certificate I gave to the parents, and on presenting it to the registrar it was refused and they were told to go to the police. The police directed the people back to me and I gave them a detailed letter to the registrar explaining the cause of death. This he also rejected, and the police then had to communicate with the coroner, who on reading the certificate and letter issued an order for burial. My death certificate was thrown about the police office, whence I afterwards took it and gave it to my solicitor. In consequence of the action of the registrar the rumour has gone forth that, first, I poisoned the child, and, secondly, that my certificates will not be accepted. This has done me a great amount of damage, financially and professionally. The people now, when cases I am attending become serious, call in another doctor in order that the certificate may be all right. I have only been in practice here a little over a year, and my name and reputation are all I have to depend upon.

Section 20 of the Births and Deaths Registration Act, 1874 (37 & 38 Vict., c. 88) says:—

> "In case of the death of any person who has been attended during his last illness by a registered medical practitioner, that practitioner shall sign and give to some person required by this Act to give information concerning the death, a certificate stating to the best of his knowledge and belief the cause of death, and such person shall upon giving information concerning the death, or giving notice of the death, deliver that certificate to the registrar, and the cause of death as stated in that certificate shall be entered in the register, together with the name of the certifying medical practitioner."

The registrar here is not a medical man. I am, myself, a registered practitioner since 1888. I have given the matter into the hands of my solicitor, but I wish myself to be fortified by your great experience.

I am, Sirs, yours truly,

April 27th, 1896. EDWARDUS.

*** Our correspondent went too much into particulars. He gave a sufficient cause of death in catarrhal croup. In using the words "carbonic acid poisoning"—accurate enough in a scientific sense—he gave information which was too much for the recipients, who have to use such judgment as they have in referring certificates to the police or the coroner. They might have acted with more respect to the certifier, but the only revenge we should advise is very scant doses of pathological information in future in his certificates to such an inappreciative registrar. Pearls are only beautiful to the capable eyes.—ED. L.

Sudens.—We have reviewed the periodical in question and have not found the numbers noticed wanting in taste. Its career is already determined.

THE RADNOR WATER CO., OF MONTREAL, CANADA.

THIS company send us further samples from their spring. Having recently examined this interesting water, which is a purely natural one and delicate to the taste, there is no need for further examination, especially as it was the subject of an analysis published in THE LANCET of Jan. 18th last, p. 173.

Ambulance.—It seems to us that B. and C. should meet and determine to be amicable. C. has a right to accept the invitation, but B.'s sense of grievance is not unnatural.

THE PUBLIC ADVERTISING OF MEDICAL BOOKS.

To the Editors of THE LANCET.

SIRS,—A placard, of which enclosed is a copy, has been for some days posted on the wall by the side of the shop window of Messrs. Cornish, booksellers, New-street, Birmingham. The placard is some two feet long and six inches wide, and the letters large and conspicuous. The Royal College of Physicians of London ought to be proud of its Fellows.

I am, Sirs, yours truly,

Birmingham, April 28th, 1896. HONOR.

[COPY.]

NAUHEIM (SCHOTT) TREATMENT OF HEART DISEASE.

BY

R. SAUNDBY, M.D., F.R.C.P.

*** We are confident that this advertisement cannot have come to the notice of Dr. Saundby himself and that he will now take immediate steps to stop such an objectionable parade of his name and his writings. The enterprising tradesman will, we fear, never be brought to see that "Publicitas publicitatum, omnia publicitas" is *not* the motto of the medical profession.—ED. L.

Mr. N. W. Holmes is thanked for his communication.

MEDICAL SOCIETY (COURT FORESTERS' ISLE, No. 1822).

WE have received from a correspondent a balance-sheet of this medical aid society. It does not contain details of the number of patients attended, number of visits made, &c., so that there is no way of estimating whether the rate of payment is one that should be accepted by the medical officers; but in any case these medical officers, viz., Dr. W. Hoffmeister, Mr. J. B. Hoffmeister, and Mr. E. Watson Paul—should insist upon having the lyric effusion with which it terminates removed. It is discreditable to these gentlemen that their names should be brought before the public in this manner. We append the sinning verses:—

> "Where are you going to, my pretty maid?
> To the Foresters' Hall, kind Sir, she said.
> Why are you going, my pretty maid?
> Oh, I am going to join the Medical Aid,
> It's a first-rate society, kind Sir, she said.
> Who are the doctors, my pretty maid?
> Messrs. Hoffmeister and Paul, kind Sir, she said.
> Then all should join it, my pretty maid!
> Oh, yes, oh, yes, kind Sir, she said."

An Old Subscriber.—The practice is time-honoured. But it is in these days more honoured in the breach than in the observance. In many places the poorer patients look for the sign.

THYROID FEEDING.

To the Editors of THE LANCET.

SIRS,—I should be grateful if any of your readers could give me some information on thyroid feeding by the fresh gland, with especial reference to the following points—(1) quantity for, say, a week; (2) mode of preparation; and (3) dangers of excess, if any, and symptoms of same.

I am, Sirs, yours faithfully,

April 26th, 1896. P. W.

Sufferer has omitted to enclose his card.

ERRATUM.—We regret that the words "senior surgeon, Ancoats Hospital," should have been added to Dr. Martin's communication last week. The correct reading is—late senior house-surgeon, Ancoats Hospital.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

During the week marked copies of the following newspapers have been received:—*South Wales Daily News, Birmingham Gazette, Huddersfield Chronicle, Eastern Daily Press, Western Morning News, West London Observer, Wolverhampton Chronicle, Craven Herald, Brighton Gazette, Elgin Courant, Kentish Express, Southampton Times, Liverpool Daily Post, Grimsby News, Goole Times, Hampshire Independent, Sussex Daily News, Leyton Independent, Bury Guardian, Stroud News, Arbroath Guide, Bristol Mercury, Highland Times, Salisbury Journal, Birmingham Mail, Yorkshire Post, Manchester Courier, Liverpool Courier, Leeds Mercury, Sheffield Independent, Contractors' Chronicle, Kendal Express, Builder, Ayrshire Weekly News, Times of India, Galloway Gazette, Pioneer Mail, Architect, Sanitary Record, Le Temps, New York Herald, North China Daily Mail, Madras Times, New Zealand Herald, Bombay Gazette, Montreal Herald, Reading Mercury, Mining Journal, Weekly Free Press and Aberdeen Herald, Local Government Chronicle, Hemel Hempstead Gazette, City Press, Hertfordshire Mercury, West Middlesex Standard, Local Government Journal, Surrey Advertiser, Walsall Observer, Walsall Free Press, Penrith Observer, Guernsey Star, Kelso Mail, Cumberland Advertiser, Citizen, Tablet, Electricity, English Mechanic, Building News, Airdrie Advertiser, Whitehaven Free Press, West Cumberland Times, Cape Times, Loughborough Monitor, North Devon Herald, Langport Herald, Thanet Guardian, Lincolnshire Echo, Public Health, &c., &c.*

Communications, Letters, &c., have been received from—

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Letters, each with enclosure, are also acknowledged from—

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